SOMALI REPUBLIC
Planning Commission

Short Term Development Programme

1968 - 1970

MOGADISCIO, August, 1968

24 JUL 1969

13474

30411

INTERNATIONAL LABOUR OFFICE
CENTRAL LIBRARY AND
DOCUMENTATION BRANCH

30414

FOREWORD

Eight years ago, in 1960, the Somali Republic was born. The Somali people, wherever they were, shared the expectations of other developing peoples for social, economic and political advancement. Naturally, much of our resources and energies have been devoted to the work of political consolidation. Yet, the Government has always been alive to the need for social and economic progress despite the existence of inherited problems facing the young Republic.

Three years after independence, the first Somali Government launched the First Five Year Plan (1963-67). This was the first major step in the right direction. As we all know, the First Five Year Plan expired in 1967. The available information indicates that its success was modest.

Now we are witnessing the launching of the second attempt at organized development planning. The Planning Commission and the Council of Ministers have approved the Three Year Development Programme (1968-70). As has been pointed out and emphasised elsewhere, this is a realistic consolidatory development programme. Before embarking on another ambitious expansionary development programme in the seventies, the Government found it necessary to put in order first what has so far been attempted, i.e., completion of the projects which have been started and the efficient managment of the projects which have been completed. This is no small a task and its success will largely depend on hard work, discipline, dedication and organizational improvement in almost all spheres of life and specially in administration and basic attitudes.

We have to make sure that rate of implementation of the Three Year Development Programme is much higher than the one we had achieved during our first five years of planning. Only then can we look forward to a future of meaningful economic and social progress. Our achievements during the coming three years, of which I am optimistic, will go a long way in proving the usefulness of the idea of «progress through planning».

Finally, as I see it, this is another challenge to the Somali people and I have every hope that the challenge will be met with success.

MOHAMED IBRAHIM EGAL
Prime Minister

TABLE OF CONTENTS

INTRODUCTION — Page i

Chapter 1 — Strategy & Objectives
  The First Five Year Plan — 3
  The Short Term Development Programme — 9

Chapter 2 — Financing the Programme — [illegible]

Chapter 3 — Banking, International Trade and Payments
  a. Banking — 11
  b. Foreign Trade and Payments — 21
  c. Foreign Indebtedness — 23

Chapter 4 — Public Finance — [illegible]

Chapter 5 — Administrative Framework — [illegible]

Chapter 6 — Agriculture and Related Activities
  A. The Setting and Strategy of Development
    a. Agriculture — 57
    b. Forestry — 70
    c. Fisheries — 73
  B. The Projects
    a. Agriculture — 74
    b. Forestry — 83
    c. Fisheries — 84

Chapter 7 — Animal Husbandry
  A. The Setting and Strategy of Development — 86
  B. The Projects — 93

Chapter 8 — Irrigation — 103

Chapter 9 — Industry, Power and Mining

A The Setting and Strategy of Development

a. Industry . . . Pag. 113
b. Power . . . » 114
c. Mining . . . » 116

B The Projects

a. Industry . . . » 118
c. Mining . . . » 121

Chapter 10 Basic Infrastructure

A The Setting and Strategy of Development . . . » 123
B The Projects . . . » 125

Chapter 11 Social Infrastructure

A The Setting and Strategy of Development —
a. Education . . . » 137
b. Manpower, Employment and Training . . . » 143
c. Health . . . » 147
d. Community Development and Social Welfare . . . » 149

B The Projects

a. Education . . . » 152
b. Manpower, Employment and Training . . . » 154
c. Health . . . » 156
d. Community Development and Social Welfare . . . » 159

Chapter 12 Statistics and Cartography

a. Statistics . . . » 163
b. Cartography . . . » 166

MAPS

1 — Map of Somalia . . . Facing » 1
2 — Juba River Basin . . . » » 113

EXPLANATORY NOTE

1. Sh. in the text refers to Somali Shilling.

2. A conversion rate of U. S. $1 = So. Sh. 7.14 has been used.

3. Figures in some tables have been rounded off to the nearest final digit. Hence there may be some discrepancy between a total as shown and the sum of its components.

4. The following symbols have been used throughout.

n. a. = not available

— = nil

. . . = negligible

INTRODUCTION

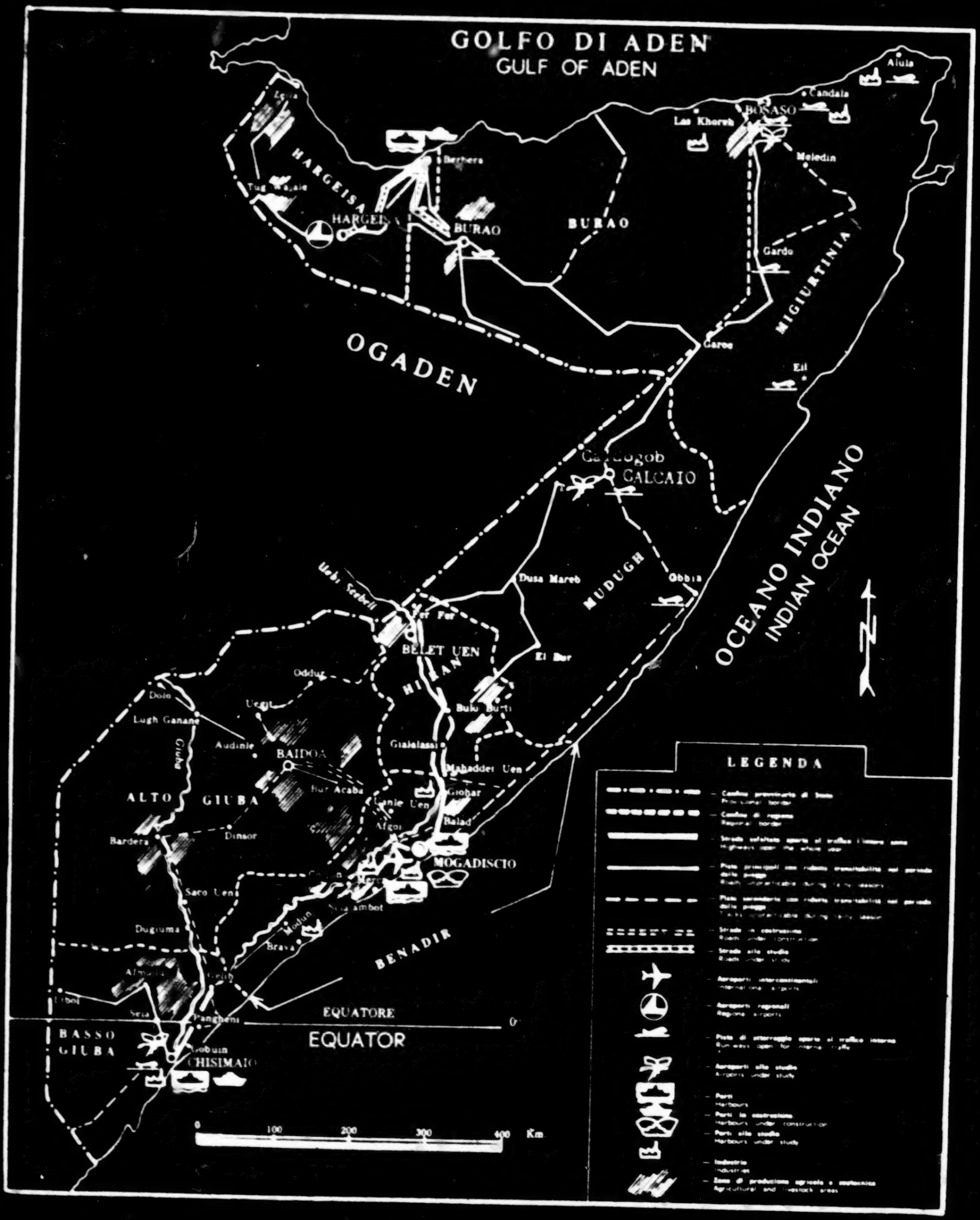
The Short Term Development Programme (1968-1976) is tangible proof of our nation's determination to face up to the challenge of economic development and social change. Much has been attained since independence. Indeed the Programme is symptomatic of our continuing struggle against poverty and disease and our desire to raise the living levels of our people and break with the inherited structure of backwardness. There is no doubt in our minds that this battle against backwardness will eventually be won, but we harbour no illusions that the struggle will be long and protracted, extending well beyond the time-horizon of the Programme. In this respect it must be seen as prefatory to more refined and sophisticated plans that will ultimately embrace both the public and the private sectors.

Fulfilment of the Programme's public sector objectives will be a long step forward in overcoming many of the trammels that impede our advance into self sustained growth. The economic transition, in all sectors, is now underway. Such transitions are already vividly manifest in both the commodity sectors, as well as in basic and social infrastructure. We realise that fulfilment of our Programme's objectives depend, in the last analysis, on the support of all our people, requiring mobilization of all our talents at every level; the alternative to such mobilization and institutional renewal is failure and stagnation. It is, in this respect not merely an official government document but a national one in the widest possible sense of that word. It articulates our people's desire for greater equality of opportunity and freedom from want. We are also cognizant that political independence without economic independence is a frail structure. In forging ahead for the benefit of our people we shall inevitably serve to reinforce our political independence. In our progress we have been assisted by friendly countries and international agencies, but we must clearly understand that such aid which has been forthcoming and invaluable to the development process can never be a substitute for national self reliance.

In the course of the Programme it will be mandatory to adjust and drastically reshape our institutional framework in conformity with the pressing demands of economic and social change.

We have described our shortfalls with the candour they merit. This reveals the strength and maturity of our democracy which has grown and flourished since independence bringing in its wake a far greater sense of national cohesion. Recognition of our shortcomings is not therefore suggestive of our weakness but rather of our strength — a strength born from our enduring faith that the defects, such as they are, are purely transitional, and that the strategy we have blueprinted will overcome them.

Admittedly, our public sector programme is modest in its financial dimensions, but it embraces the entire nation. Consequently, its implementation calls for the close and harmonious working of the public and the private sectors, and of all social groups and classes. Indeed, it is only by our joint and sustained efforts that the vitalizing dynamic inherent in our Programme is attainable. In societies, as in nature, great beginnings are always modest; the forced march to modernization is very long, uphill and arduous; and it is only by hard work, discipline and self-sacrifice that the Programme will become a living reality. Without such attributes it will remain an empty piece of rhetoric. The gap between promise and fulfilment can at times be wide. Given dynamic leadership and the wise husbanding of our resources, the aims of the Programme, embodying our hopes and aspirations will be fulfilled.


GOLFO DI ADEN
GULF OF ADEN
Zeila
HARGEISA
Tug Wajale
HARGEISA
Berbera
BURAO
BURAO
Alula
Candala
BOSASO
Las Khoreh
Meledin
Gardo
MIGIURTINIA
Garoe
Eil
OGADEN
Galdogob
GALCAIO
MUDUGH
Obbia
Dusa Mareb
Uebi Scebeli
Fer Fer
BELET UEN
HIRAN
El Bur
Bulo Burti
Oddur
Uegit
Dolo
Lugh Ganane
Giuba
Audinle
BAIDOA
Gialalassi
Mahaddei Uen
Bur Acaba
Giohar
Balad
Afgoi
Uanle Uen
ALTO GIUBA
Bardera
Dinsor
MOGADISCIO
Merca
Saco Uen
Genale
Sciamambot
Modun
Brava
Dugiuma
BENADIR
Afmadu
Gelib
Erbol
Sesa
Margherita
EQUATORE
EQUATOR
0°
BASSO GIUBA
Gobuin
CHISIMAIO
OCEANO INDIANO
INDIAN OCEAN
N
0
100
200
300
400
Km
LEGENDA
Confine provvisorio di Stato
Provisional border
Confine di regione
Regional border
Strade asfaltate aperte al traffico l'intero anno
Highways open the whole year
Piste principali con ridotta transitabilità nel periodo delle piogge
Roads impracticable during rainy season
Piste secondarie con ridotta transitabilità nel periodo delle piogge
Tracks impracticable during rainy season
Strade in costruzione
Roads under construction
Strade allo studio
Roads under study
Aeroporti intercontinentali
International airports
Aeroporti regionali
Regional airports
Piste di atterraggio aperte al traffico interno
Run-ways open for internal traffic
Aeroporti allo studio
Airports under study
Porti
Harbours
Porti in costruzione
Harbours under construction
Porti allo studio
Harbours under study
Industrie
Industries
Zone di produzione agricola e zootecnica
Agricultural and livestock areas

Chapter 1

STRATEGY AND OBJECTIVES

The First Five Year Plan

Somalia's First Five Year Plan was published in July, 1963, i.e., about three years after independence. It sought to set out the economic and social goals of the nation and the means for their attainment. An appraisal of the achievements at the end of the five year period reveals that in spite of the substantial progress made in many fields such as basic physical and social infrastructure (construction of roads, sea ports, airports, schools, hospitals etc.), industry, agriculture and livestock, overall performance as judged against Plan targets and objectives fell short of expectations; important policy measures and projects included in the Plan were never implemented and others that were executed did not have the desired effect. Many projects are still in various stages of completion or are facing a variety of problems to which solutions have to be found before they can go into effective operation.

Several factors contributed towards the slow progress made during the Plan period. In the first place, efforts of the nation were directed in these earlier years of independence towards political consolidation. This was natural. It meant that more often than not political considerations had to take precedence over economic, and that in the process of decision making inadequate attention was given to the requirements of Plan implementation. The goal of political consolidation has been realised in as much as a very high degree of political stability based on sophisticated democratic processes of government has been attained in a short period of time. This was no mean achievement considering that at the time of independence the challenge was to forge a single state out of two different countries with separate systems of education, administration, legislation, etc., conducted in two different languages.

Another major constraint that had to be faced in the execution of the First Five Year Plan was financial. While the dependence of most programmes on foreign sources for financing had its own inherent drawbacks, shortfalls in the availability of local currency requirements proved an effective limitation. The budgetary deficits inherited from the colonial period continued to persist and in spite of vast improvements that had been made, there still remained an appreciable gap between government revenue and current expenditure. This clearly had serious implications for the implementation of the First Five Year Plan — essentially a public sector programme.

Perhaps, the single most important factor responsible for the disappointing performance of the Five Year Plan was the deficiency of the administrative machinery of government. The nature of the manpower constraints and administrative obstacles to development and proposals for their removal are discussed more fully elsewhere in this document. It is only necessary to point out here that the ineffectiveness of public administration experienced in the early years of independence was largely inevitable and more so in the case of Somalia in view of the widely divergent systems and procedures of administration that existed in the two regions of the Republic at the time of independence.

Finally, it should be mentioned that the nature and format of the Plan itself contributed in no small measure to the difficulties encountered during implementation. It was Somalia's first experiment in development planning and in spite of the fact that, under the circumstances, it was a highly meritorious document, it had, as a Plan, many defects originating from the absence of basic statistical data and information relating to different sectors of the economy. It also proved to have been somewhat overambitious. No feasibility studies had originally been worked out for the projects and programmes included in the Plan and as a consequence a number of them turned out to have been ill-conceived. The cost estimates for projects in the Plan were also crude and no phasing for the execution of the programmes was done. These same defects, which have been found to be unavoidable for the same reason, are also reflected, although to a lesser degree, in the current Short Term Development Programme.

The Short Term Development Programme

The situation described above, obtaining at the end of 1967 and the better understanding of the real problems of implementation that faced the First Five Year Plan underlined the urgent need for a new approach to the problems of development planning in Somalia. The existence of a large number of incomplete programmes in which vast investments had already been sunk, made it imperative that efforts be directed towards the consolidation of the work initiated under the First Five Year Plan. The glaring administrative and institutional shortcomings that proved to be such an effective brake to development had to be removed and attempts made to eliminate the persistent budgetary gap. Consequently, instead of drawing up a second medium term plan for increasing production an interim plan of the nature of a consolidatory programme had to be worked out. The principal objectives, therefore, of the present Programme are the consolidation of the work of the First Five Year Plan and the creation of basic conditions necessary for the formulation and implementation of future development programmes of a more ambitious nature. More specifically, the objectives are:

(a) Completion of on-going projects (including the physical completion of those under construction or negotiation and the successful operation of others);

(b) Introduction of basic structural changes in the administrative set up with a view to gear it to the needs of rapid development;

(c) Closing the existing budgetary gap and the mobilisation of more domestic resources for development.

In determining project priorities these objectives have constantly been borne in mind. Highest priority has been accorded to on-going projects and those of the nature of institutional support. Whenever it was found necessary to include new projects in the Programme, preference was given to those of a complementary nature to an on-going project or those involving the least burden on the budget such as self-help schemes or self-liquidating projects. At the same time, attention was continuously given to the impact of these programmes on the balance of payments and the creation of employment opportunities. On the whole, the Programme that has emerged is simple in its conception. It is not framed on macro-economic aggregates due to the non-availability of basic statistics such as national accounts and population data. It is confined to the public sector even though its overall effects will be more widely diffused.

Besides the recognition of the need for a consolidatory programme, two other elements in the present developmental strategy of Somalia should be mentioned. The first of these is the desire to integrate the economy of Somalia into that of the wider East African region. This is based on an attitude born out of recent political and other trends in the region; the creation of wider economic groupings all over Africa in the past few years; and an awareness of the vital role that regional integration could play in the transformation of the economies of individual countries as well as that of the continent as a whole. Somalia has, accordingly, already applied for membership in the newly formed East African Economic Community.

The second element in the new strategy is the decision to initiate steps for the integrated development of the Juba Valley which by far has the greatest developmental potential in the country. It is estimated that not less than 250,000 hectares along this valley are capable of supporting irrigated agriculture once the land is protected from floods and supplied with irrigation and drainage works. It is expected that financing for this project will be secured through an international consortium and the government has already taken the initial steps in this direction. There is no doubt that the optimum utilisation of foreign assistance available to this country can be secured only through the implementation of an integrated development scheme of this nature.

Chapter 2

FINANCING THE PROGRAMME

The total outlay envisaged in the Short Term Development Programme is Sh. 705.0 million. The sectoral allocation of this expenditure is shown below:

Short Term Development Programme
Allocation of Expenditure by Sector

	Sh. 000	*Per cent*
Agriculture and related activities	53,996	7.7
Animal Husbandry	45,910	6.5
Irrigation	3,477	0.5
Industry, Power and Mining	37,859	5.4
Basic Infrastructure	497,663	70.5
Social Infrastructure	63,133	9.0
Statistics and Cartography	2,697	0.4
TOTAL	705,035	100.0

These allocations are in broad conformity with the objective of consolidating the work undertaken through the First Five Year Plan.

The allocation to agriculture and related activities, at [illegible] per cent, compares with 17.8 per cent provided in the First Five Year Plan. The estimates of that Plan for the agricultural sector, apart from being rough approximations, also included allocation for the creation of a central agricultural machinery pool and the state farms; these two items alone accounted for nearly 10 per cent of the total expenditure envisaged in the Plan of Sh. 1,400 million. While the pool of agricultural machinery has been created during the period up to the end of 1967, the expenditure on the state farms during the Programme will total only some Sh. 6.5 million.

The Programme provides a sum of Sh. 45.9 million to Animal Husbandry, representing 6.5 per cent of total outlay. This includes expenditure on an EEC pilot project described fully elsewhere. While the total expenditure on this pilot scheme alone is expected to be Sh. 42.5 million, only a sum of Sh. 10.1 million is included in the Programme as anticipated outlay up to end of 1970.

5.4 per cent of the total Programme outlay is allocated to Industry, Power and Mining. This is in conformity with Programme objectives. Emphasis is confined to the completion and successful operation of the state owned fish, meat and milk processing plants and the construction of a cement factory.

In the First Five Year Plan, provision was made for an irrigation scheme of an extent of 40,000 hectares along the lower reaches of the Juba river. The project was not implemented during the Plan period; instead, a more comprehensive survey of the irrigation potential of the Juba was undertaken and completed. Negotiations for financing of a phased development of the Juba have now been initiated. No allocations are however made in the Programme for the development of this river. In regard to the Shebelli, on the findings of an earlier UN Special Fund assisted agricultural and water survey, a further pre-investment project assisted by the same source is under way and incorporated in the Programme.

The highest priority, in the Programme, has been given to basic infrastructure projects — transportation, posts and telecommunications and water supplies. The outlay on basic infrastructure provides for expenditure on certain projects included in the First Five Year Plan, but not implemented, (such as Afgoi-Baidoa and Berbera-Hargeisa roads, Mogadishu Port, telecommunications programme and water supply schemes for Mogadishu, Kismayu and Hargeisa); and others (such as Berbera and Kismayu ports) included in the First Five Year Plan but not completed by the end of 1967. Together this spill-over acounts for some Sh. 395.8 million out of the total outlay of Sh. 497.7 million provided in the Programme for this sector.

The sector «Social Infrastructure» includes education, health, manpower, employment and training and community development projects of a self-help nature. The sum allocated to these activities is Sh. 63.4 million or 9.0 per cent of total Programme outlay. On education, emphasis is placed on a school construction programme, financed out of grants. Health projects include a programme of construction and the continuation of WHO activities. «Manpower, employment and training» provide for manpower survey, the construction of a craftsmen training centre, continuation of the activities of the Somali Institute of Public Administration and the construction of the new buildings for the Institute. Allocations for community development mainly represent outlays on World Food Programme assisted projects. Utilization of loan funds for financing projects falling within the sector «Social Infrastructure» is not envisaged in the Programme.

The First Five Year Plan provided for the undertaking of various surveys, investigations and research. These included an agricultural and water survey; study of diversification and development of agriculture; iron ore survey; survey of fisheries resources, livestock marketing study; banana production and marketing study; cadastral survey and land registration; cartography survey; overall transport survey; manpower survey; and multipurpose statistical surveys. Most of these surveys and studies have been completed during the period up to the end of 1967. The Programme accordingly provides a token outlay for «Statistics and Cartography surveys».

A final balance sheet of the implementation of the First Five Year Plan is not yet available. A comprehensive analysis of the extent to which the Plan was executed is, in any event, rendered difficult by the fact that in many instances the Plan document does not specify the investment estimate for each project but only an overall figure for a group of projects or even for a complete sector. A study made in the Ministry of Planning and Coordination reveals that the rate of implementation was faster in 1963 and 1964, but tapered off in 1965 and 1966. This was partly due to the fact that in the initial Plan period there were a number of projects beyond the stage of financial approval. Towards the latter part of the Plan period, however, implementation was delayed by the time taken for preparation of new projects and negotiation for financing them. Several indications point to the fact that about 50 per cent of the expected outlay or Sh. 700 million had actually been incurred during the 5 year period up to the end 1967.

Judged by this performance — Sh. 700 million in 5 years — the Short Term Development Programme target of Sh. 705 million over a 3 year period would seem to be not only ambitious but difficult to attain. But it should not be overlooked that the current Programme contains a number of project which are already ongoing and certain others in respect of which financial agreements exist or negotiations are continuing. Where negotiations are in an advanced stage but not complete, it was decided to include in the Programme the entire cost of such a project in the absence of a phased expenditure plan. While it would be reasonably certain that the implementation of such projects will commence during the Programme period, there is no corresponding certainty that their completion date will not extend beyond that period.

The First Five Year Plan evisaged an expenditure of Sh. 1400 million for its implementation. Of this sum, an amount of Sh. 677 million was development aid negotiated with friendly countries and international organisations. This still left a resource gap of Sh. 723 million. Only a very limited contribution was foreseen from the three possible sources of internal finance (i.e. public savings, deficit finance and private savings), to cover this gap; the limitations were clearly spelt out in the Plan: budgetary contributions to development would not be possible as long as the deficit inherited from colonial rule persisted; the safe limits to deficit financing in Somalia were very small; and the bulk of private savings would be required for financing development in the private sector itself. It was therefore expected that the shortfall would be met mainly out of further foreign assistance.

A forecast was made in the First Five Year Plan that government would have to raise about Sh. 150 million of additional revenue during the Plan period 1963-1967, in order to balance the budget by the end of 1967. In making this assessment, consideration was given to the fact that expenditure was also bound to increase as a result of the strengthening of government administration, which was essential for the implementation of the Plan. Actual performance, however, fell short of the target. While revenue increased from Sh. 142.7 million in 1962 to an estimated Sh. 248.1 million in 1967, expenditure increased from Sh. 158.0 million to an estimated Sh. 272.1 million during the same period.

Increases in revenue in the past have largely been directed towards meeting current expenditure. This is a normal tendency during the initial years of independence. The present budgetary classification does not lend itself easily to a complete separation of whatever development expenditures are in fact reflected in the budget. A detailed analysis of the fiscal developments since independence is given in the chapter on Public Finance.

Table on page 9 sets out, by sub-sector, the sectoral allocation of Programme expenditure shown on page 4.

The sources of finance for the Programme are shown on page 10. Domestic sources together account for 12.5 per cent of the total outlay of Sh. 705.0 million; foreign grants and loans respectively for 22.4 and 24.1 per cent; the balance 41.0 per cent, expected to be financed out of foreign grants and loans, is shown as unspecified.

The sum of Sh. 22.1 million shown under «ordinary budget» is a projection, up to the end of 1970, of items already reflected in the budget of 1968. Some contributions in kind for U.N. Special Fund assisted projects are also included in this figure. The item «additional budgetary provision» is indicative of the measure of extra revenue required from budgetary sources; out of a total of Sh. 30.0 million, a sum of Sh. 12.5 million is allocated to the social infrastructure sector, mainly for education, health and community development projects incorporated in the Programme. The item «others» shown under domestic sources of finance consists of: private sector contributions including an element of foreign private investment (Sh. 20.0 million), contributions from municipalities and local bodies (Sh. 1.5 million) for the community development projects; and contributions from the budgets of the Agricultural Development Agency (Sh. 1.2 million) and the Livestock Development Agency (Sh. 13.3 million). The sources of finance of these two Agencies are annual subventions from the ordinary budget; income from own activites, and loans and grants. In the case of the L.D.A. a further item of income accrues from the collection of veterinary fees on exported animals.

Foreign grants of Sh. 157.6 million and foreign loans of Sh. 170.4 million represent amounts already negotiated and earmarked. The unspecified item of Sh. 288.9 million consists of two parts: included in the first part is a sum of Sh. 160.2 million representing the cost of two projects to be financed out of long term loans. Negotiations with the creditors are in an advanced stage. They are nevertheless shown as unspecified as the respective financial agreements are yet to be signed. The second part of Sh. 128.7 million is the resources gap which is expected to be financed out of foreign grants and loans. The negotiated but uncommitted grants and loans available are adequate to cover a part of this balance. In respect of loans, however, the existing terms and conditions of available amounts will need renegotiation in order to ensure that disbursements out of them are repayable on concessionary terms, in view of the already heavy burden of servicing. Negotiations in this regard are already under way.

An estimated sum of nearly Sh. 25.1 million is required as working capital for certain projects incorporated in the Programme. This sum is not included in the Programme outlay of 705.0 million.

Short Term Development Programme
Allocation of expenditure by sub-sector

Sector	*Sh.'000*	*Per cent*
AGRICULTURE AND RELATED ACTIVITIES	**53,996**	**7.7**
Agriculture	46,932	6.7
Forestry	2,137	0.3
Fisheries	4,927	0.7
ANIMAL HUSBANDRY	**45,910**	**6.5**
IRRIGATION	**3,477**	**0.5**
INDUSTRY, POWER AND MINING	**37,859**	**5.4**
BASIC INFRASTRUCTURE	**497,663**	**70.5**
Roads	191,307	27.1
Bridges	6,411	0.9
Ports	145,400	20.6
Civil Aviation	11,942	1.7
Telecommunications	23,973	3.4
Postal Services	1,300	0.2
Water Supplies	117,330	16.6
SOCIAL INFRASTRUCTURE	**63,433**	**9.0**
Education	26,780	3.8
Health	16,208	2.3
Manpower, Employment and Training	11,198	1.6
Community Development and Self-help	9,247	1.3
agriculture	(216)	
animal husbandry	(172)	
irrigation	(478)	
basic infrastructure	(1,327)	
social infrastructure	(7,054)	
STATISTICS AND CARTOGRAPHY	**2,697**	**0.4**
Statistics	1,500	0.2
Cartography	1,197	0.2
TOTAL	705,035	100.0

Short Term Development Programme outlay — sectoral allocation and sources of finance

(Sh. '000)

SECTOR	DOMESTIC			FOREIGN			TOTAL
	Ordinary Budget	Additional Budgetary Provision	Other	Grant	Loan	Unspecified	
1. Agriculture & related activities	4,452	9,738	17,862	18,991	2,588	365	53,996
2. Animal Husbandry	2,074	850	13,266	25,290		4,430	45,910
3. Irrigation	708	—		2,769			3,477
4. Industry, Power & Mining	3,060		3,400	4,232	11,767	15,400	37,859
5. Basic Infrastructure	6,780	5,790		65,411	155,724	263,958	497,663
6. Social Infrastructure	5,041	12,516	1,490	40,852		3,534	63,433
7. Statistics & Cartography		1,500				1,197	2,697
TOTAL	22,115	30,394	36,018	157,545	170,079	288,884	705,035
Per cent	3.1	4.3	5.1	22.4	24.1	41.0	100.0

Chapter 3.

BANKING, INTERNATIONAL TRADE AND PAYMENTS

a) Banking

The beginnings of modern commercial banking in Somalia can be traced to 1920, when the Bank of Italy opened its first branch in Mogadishu. Five years later it opened a second branch in Kismayu to assist plantation development in that area, sponsored by the Italian Government. The Banco di Roma opened its first branch in Mogadishu in 1936. The Cassa di Risparmio di Torino which had been conducting operations in Mogadishu since 1932 was taken over by the Banco di Napoli in 1938. In the same year the Bank of Italy opened an agency in Merca which was being developed as an outlet for the Genale banana plantations. After the outbreak of hostilities in 1939, almost all banking activities came to a stop. Some basic banking services were, however, rendered by Barclays Bank during the war.

The Italian banks resumed their operations after the establishment of the Italian Trusteeship Administration in 1950. The activities conducted by Barclays were handed over to the Bank of Italy which then began to perform central banking functions. Both the Banco di Napoli and the Banco di Roma resumed operations in Mogadishu. Whereas the former extended its operations to Kismayu and Margherita, the Banco di Roma opened an office in Merca. In 1961 the Banque de Port Said opened a branch in Mogadishu.

No commercial banking facilities existed in the north before the war. A government savings bank was, however, established in 1930, and in 1940 for a brief period the Bank of Italy opened a branch in Hargeisa. After the war, National and Grindlays commenced commercial operations in the north under its former name «National Bank of India». Its first branch was established in Hargeisa in 1952, the second in Berbera in 1954.

Credito Somalo was set up in 1954 to extend credit facilities to agriculture, livestock and small scale industries and particularly to these producers unable to provide the necessary collateral required for conventional commercial banking loans. Original capital was provided by the Trusteeship Administration. Persons obtaining production loans were required to market their crops to the government which then made payments after deducting capital and interest charges. Credito Somalo also operated a special rental service of agricultural machinery. Branches and agencies were set up in the main agricultural areas of the country. Large deficits were incurred in the course of these operations and Credito Somalo therefore abandoned these extra banking commitments. It was thereafter reorganised and authorised to accept savings deposits. In 1957 a separate section was established to deal with mortgage credit, and in 1958 a further section for medium and long term loans was set up.

The Somali National Bank which is the Central Bank of Somalia was inaugurated on 1 July 1960 and coincided with Independence; its network now embraces all regions of the Republic. The Constitutive Law governing the Bank's activities, provides for it to undertake commercial banking in addition to its Central Banking functions. In view of the Bank's direct connection with the problems of economic development, it is authorised to purchase securities issued or guaranteed by the government.

Somalia's present banking system consists of the Somali National Bank and five commercial banks. Four of these: Banco di Roma, Banco di Napoli, Banque de Port Said and National & Grindlays are branches of foreign banks, whereas the fifth, Credito Somalo, is a government institution.

Since its inception in July 1960 up to 1962 the Bank was mainly oriented towards central banking. From 1963, however, it became increasingly more active in banking operations of a commercial character. By the end of 1967, out of a total domestic credit creation to the private sector of Sh. 190.8 million its share had risen to Sh. 97.9 million.

Its major functions as a central bank are: currency issue; maintenance of the country's international reserves; financial agent and Banker to the government, fulfilling a supervisory role over commercial banks, and on behalf of the Ministry of Industry and Commerce, implementing the provisions of the Foreign Economic Transactions Ordinance.

As the central issuing authority, it maintains a 100 per cent currency cover. As government banker it provides temporary advances which are by law restricted to 10 per cent of the previous years' revenue, and up to 15 per cent under exceptional circumstances. It had also set a precedent of granting «special» advances over and above the statutory limits, in anticipation of Italian budgetary assistance. Various pressures arising out of special circumstances connected with public sector development projects, however, at times compelled the Bank to depart from these general principles.

The commercial banks, with the exception of Credito Somalo, have traditionally confined their activities to short term credit accorded to established large scale traders and plantation owners. Their credit operations rose sharply during 1962, and consistently thereafter. Commercial bank deposits have, however, not grown commensurately with the increase in credit: the bulk of such credit is earmarked to finance imports, but due to a chronic trade deficit foreign exchange receipts have been outpaced by import requirements. Commercial bank deposits dropped from 1964 to 1966; this stemmed from the credit ceilings imposed on their operations, in accordance with the Government's undertakings to the International Monetary Fund. Commercial bank reserves rose between 1960 and 1963 but tapered off thereafter.

The first policy statement of the government envisaged legislation for the setting up of a Somali Development Fund. The Fund was expected to function along the lines of development banks in other parts of the world, and channel middle and long term savings towards development objectives. The funds were to integrate foreign capital investments in agriculture, industry, transport, public works and public utilities. Its resources were to be supplemented with the proceeds of foreign loans and the issue of state guaranteed bonds. A project for establishing a public Corporation for this purpose was, in fact, approved by the Cabinet. The Corporation's management was to be delegated to the Somali National Bank which was also to provide the initial capital. Other institutions, public corporations, financial organisations, foreign and local banks and companies were to be authorised to participate as shareholders. This first tentative step since independence to create a development bank never materialised.

Establishment of an autonomous section within Credito Somalo for medium and long term credit was authorised in February 1959. Legislation was, however, defective, the major inadequacy being the absence of any provisions for separate and autonomous managerial control.

In March 1959, the U. S. DLF allocated $2 million to Credito Somalo on the understanding that it would organise an autonomous development loan section that would identify and promote development projects to be financed out of this amount by December 1961 (subsequently extended to July 1963). A firm of US consultants were commissioned to organise an industrial and commercial development loan section within Credito Somalo, that would attract local and foreign investors. Consultants were also required to give consideration to the problems of agricultural credit, the training of personnel, as well as render assistance in the setting up of farm cooperatives.

17 April 1963, draft legislation for the purpose was submitted to government. It was pointed out that amendment of existing legislation would provide the conditions for autonomous mangement. It was recommended that the opportunity should be taken to establish an entirely new autonomous section designed to operate as an effective development lending institution. What transpired in effect was that the existing legislation was amended and provision made for a separate managing director of the autonomous section.

The equity capital of the autonomous section of Credito Somalo of one million shillings was subscribed by the State. The equity loan ratio has been one of the major obstacles in increasing the loan capital of Credito Somalo. An equally important impediment has been its ambiguous legal status. The establishment of the Somali Development Bank is designed to overcome these vicissitudes. Misgivings have been articulated on the merger of both industrial and agricultural functions in a consolidated development bank as opposed to two separate specialised institutions. Nevertheless the critical dearth of trained and experienced personnel in development banking and the need to minimise operating costs have militated in favour of such consolidation.

The national currency is the Somali shilling with a par value of 7.14286 shillings to the U. S. dollar (0.12441 grams of gold per [illegible]).

Prior to independence, the Somalo, issued by the CCMS (Cassa per la circolazione monetaria della Somalia) circulated in the southern region, and was introduced in 1950 by the Trusteeship Administration to replace at par the East African shilling introduced during the British Administration. Before that time the currency in use in the south was the Italian lire.

The East African shilling, issued by the East African Currency Board, circulated in the northern region up to the middle of 1961. Before 1951, the Indian rupee was also widely circulated. The exchange of currencies in the north for the Somali shilling was carried out during a two month period from 22 April to 25 June 1961. The East African shilling ceased to be legal tender with effect from 26 June 1961, and was exchanged, subject to normal banking charges, from 26 June to 31 July 1961. For the amount withdrawn from circulation the Somali Republic obtained an equivalent amount in sterling from the East African Currency Board.

The Somali National Bank which took over the functions of the CCMS retains the 100 per cent legal currency cover, an arrangement which was traditional in the former dependent territories of the sterling area. In those cases where the note issue is fully backed but where banking institutions are at an incipient stage of growth, money supply tends to be automatically determined by the trend in external payments. The 100 per cent reserve system has the merit of ensuring the external stability of local currency. Before the introduction of foreign exchange restrictions this system was particularly attractive to foreign investors. Thus, the 100 per cent reserve system has long been one of the pillars of colonial banking policy.

For developing countries purposefully striving to accelerate economic growth, however, a 100 per cent currency cover raises a number of awkward problems; it relegates the issuing authority to that of a passive agent with no fundamental role in the development process. The prevailing system perpetuates colonial banking practices since it unnecessarily immobilises a sizeable proportion of the country's international reserves. It is irrational to continue to provide a cover for that part of the minimum internal circulation required to finance purely domestic transactions irrespective of the external payments position. A more strenuous objection to the prevailing system is that it permanently imparts a deflationary bias to the national economy. With the implementation of development programmes, population growth and expansion of the monetary sector, Somalia will inevitably require a commensurate increase in its money supply. Until the banking habit develops and spreads, currency in circulation will continue to be a significant part of the money supply.

Under a 100 per cent reserve system a steady increase in currency circulation can only be achieved by a sustained surplus in the balance of payments or by borrowing from abroad. While a balance of payments surplus is a luxury that a developing country can ill afford, there is no economic rationale whatever to borrow abroad to provide a cover for that hard core of bank notes required to finance purely internal transactions. Yet this is what precisely has been resorted to in recent years, for expanding internal currency requirements in face of a chronic balance of payments deficit. A measure of flexibility has, nevertheless, been attained by including gold and foreign exchange subscriptions to the IMF, IBRD, IDA and ADB as part of the reserves covering the shillings. To that extent, therefore, the rigorous descipline of the 100 per cent cover has been mitigated.

Table on page 20 summarises the statistical data on the monetary situation for the period 1960-67.

In the immediate aftermath of independence, overall banking activities in Somalia declined. The level of credit creation in favour of the public sector contracted substantially and although currency in circulation increased, the level of money supply decreased due to a drop in demand deposits with commercial banks. By 1961 these trends were reversed. The general upturn of economic activity was partly generated by the inflow of capital on both private and official account. The trade deficit as compared with 1960 was reduced. These favourable developments were reflected in an increase in net foreign assets, which rose by over 72 per cent and helped reinforce the banking system's liquidity position. In this favourable economic conjuncture the commercial banks increased their credit to the private sector by as much as 40 per cent as compared with 1960. The Somali National Bank's net claims on government, (i.e. advances net of government deposits with the Bank) were subject to large fluctuations during the course of 1961. By the end of the year, however, government's net position with the Bank showed a surplus.

In 1962 the situation was altered due to the difficulties arising out of flood damage which occured in late 1961 resulting in a sharp cut back of banana output and exports. Short term credits were accorded to the public and private sectors to offset this national calamity. As a consequence, government's borrowing from the Somali National Bank rose. Credit to the private sector by the banking system, in 1962, increased by 80 per cent as compared with 1961. The impact of this increase in domestic credit was only partially offset by a fall in net foreign assets while money supply and quasi-money increased.

During 1963 there were divergent movements in money and credit. Taking 1963 as a whole, however, domestic credit increased by nearly 48 per cent. The Somali National Bank's share in this expansion was almost 94 per cent. A part of this, however, was due to disbursement of loans received from Italian banks for rehabilitation of the banana plantations and modernisation of the sugar factory at Johar, for which the Bank acted merely as an intermediary. As in 1962 the expansion of credit was largely absorbed by an increase in money supply and quasi-money and only to a lesser extent by a fall in net foreign assets.

1964 was a crisis year for Somalia in monetary and credit developments. The difficulties, concentrated in the latter part of the year, were caused by a sharp increase in domestic credit and a severe deterioration in the net holdings of foreign assets by the banking system. Compared with 1963 domestic credit increased by 66 per cent in 1964. The major part of this was created in favour of the private sector, and, as in 1963, the Somali National Bank was the main source of this credit expansion. The brunt of this expansion was absorbed by a drastic fall in net foreign assets by nearly 70 per cent below the previous year's level.

The Somali National Bank is the supplier of short term credit to the government and the level of this accommodation in the past fluctuated according to the lags in the accrual of budgetary aid grants from Italy. In the past there had been considerable delay in the receipt of such assistance, arising from the time lag between Italian government's decision to grant aid and its approval by the Italian Parliament on the one hand, and on the other the time lag between this approval and actual disbursement. Whenever disbursements had been delayed, the Somali government either borrowed from the Somali National Bank or from Italian commercial banks.

In the third quarter of 1964, the Italian budgetary aid in respect of 1963 and 1964 was still outstanding and government's borrowing from the Somali National Bank was correspondingly increased. During this same period credit extension to the private sector also increased sharply. The main reason underlying this extraordinary development in the private sector was the speculative stockpiling of imports induced by repeated postponements of the new foreign exchange law and the anticipation among the trading community of an increase in duty on certain items of imports.

By November 1964, net foreign assets had reached a very low point. In the next month Government was successful in borrowing Sh. 29.0 million from Italian commercial banks pending the receipt of Italian aid.

In May 1964, faced with a deteriorating payments position the Somali authorities sought a standby arrangement with the IMF amounting to **$** 4.7 million. The entire amount was used by December. The year ended with Sh. 29.9 million shillings in net foreign banking assets and Sh. 39.7 million net credit to government. The increase in domestic credit during the course of 1964, of the order of 66 per cent had been offset by 69 per cent decline in foreign reserves, while money supply remained virtually unchanged.

In early 1965, the government launched a comprehensive stabilisation programme in a determined effort to restore both internal and external equilibrium, which was supported with a further standby arrangement with the Fund of **$** 5.6 million. Restrictive credit policies were adopted and credit ceilings for the banking system were laid down for the first time in agreement with the IMF. In the second quarter of 1965 Italian budgetary aid for 1963 and 1964 was finally received and the debt to Italian commercial banks was fully discharged. However, in the following quarter government again borrowed from this source against Italian budgetary aid commitments for 1965. The full amount of the second standby arrangement was drawn during the course of the year and at the end of 1965 net foreign assets of the banking system had fallen to Sh

5.8 million from the end of 1964 level of Sh. 29.9 million. Yet, the stabilisation programme had achieved its objectives, for domestic credit had risen only by 5 per cent as compared with the all time peak of 66 per cent in 1964 and net foreign assets fallen by only 34 per cent of the decrease in 1963.

The situation was further stabilised during 1966. A third standby arrangement with the Fund, amounting to $ 2.8 million was unutilised. Domestic credit increased by only 6 per cent and was largely in favour of the public sector. Net foreign assets increased from 5.8 million to Sh. 16.7 million. Two factors which contributed to the improvement in the foreign exchange position were the receipt of the first instalment of the Saudi Arabian loan and the Italian budgetary aid for 1965. Italian budgetary aid for 1966 had not been committed during the course of the year and as the government was unable therefore to borrow from Italian commercial banks, it had instead to resort to the Somali National Bank once more. By December 1966 the Bank's net claims on the government had risen to Sh. 43.5 million. During 1966 money supply moved up by 5.5 per cent. This increase was wholly reflected in an increase in currency circulation, demand deposits actually falling by Sh. 9.5 million over the year.

The basic policy of credit operations of the SNB is to limit overall domestic credit to a point consonant with the maintenance of internal and external financial stability.

Credit extended by the Bank itself has hitherto assumed a dual aspect: temporary credit needs of the government of which the Bank is the sole supplier; and credit requirements of the private sector including accommodation to some semi-government bodies such as the State Trading Corporation, ENCE.

The Government's credit requirements in the past, arising out of the delay in the receipt of Italian budgetary support are likely to be eliminated with the coming into effect of the new law governing Italian assistance to Somalia.

In its private sector operations, the Bank's general philosophy has been based on the following guidelines: the need to provide credit facilities particularly in the nation's less developed areas where operations are un-attractive to any other bank; the desire to meet more adequately the credit needs of the indigenous agricultural and export sectors; to supplement the operations of expatriate banks whose sole motivation is profit maximisation; and to spread the banking habit and consolidate the monetary and banking system.

In recent years there has been a general deterioration in the liquidity position of commercial banks and it is likely that there will be recourse to the Somali National Bank.

If the commercial banks eventually approach the Somali National Bank, the latter will be faced with a conflict between its dual role as central banker and direct lender to the private sector.

It is clear from the account given in the preceding paragraphs that the present structure of the banking system and its operations in this country do not meet the requirements of more rapid economic growth. In view of this and considering the fact that there is a complex inter-dependence between the banking system and the economy as a whole, it is essential to ensure that these institutions should be more directly committed to the task of economic development. This would require, as a starting point, a fundamental departure from the present attitudes of bankers and the monetary authorities — an unhappy hangover from the colonial past — as well as the introduction of some structural changes in the existing institutions particularly those publically owned. Already the Medium and Long Term Loan Section of Credito Somalo has been established as a separate development bank with enlarged resources and active steps are being taken by the Government for the overhaul of the Constitutive Law of the Somali National Bank. Other important issues that should be subjected to close and careful scrutiny during the period of Short Term Development Programme are: the institution of a training programme for the present staff of the Bank; the amalgamation of the commercial banking functions of the two State banks and the separation of the central bank's present dual function. Equally important is the need for the central bank to establish a close relationship with economic ministries and agencies of the government in all matters relating to economic research and policies and the exchange of statistical information.

Somalia: Monetary Survey

(in Sh. million)

	1960	1961	1962	1963	1964	1965	1966	1967
Foreign Assets net	66.5	113.8	106.3	94.8	29.9	5.8	16.7	7.8
Somali National Bank	66.4	113.6	106.0	94.5	25.9	2.6	20.4	5.8
Commercial banks	0.1	0.2	0.3	0.3	4.0	3.2	−3.7	2.0
Domestic Credit	33.6	40.3	81.5	121.0	201.5	211.7	224.5	267.7
Claims on Govt. net	2.4	−2.2	5.0	30.1	39.7	33.8	43.5	76.9
Claims on private sector	31.2	42.5	76.5	91.0	161.7	177.9	181.0	190.8
Somali National Bank	6.0	7.5	16.6	28.7	84.8	93.1	93.6	97.9
Commercial banks	25.2	35.0	59.9	62.1	77.0	84.8	87.4	92.2
Money								
Currency in circulation	47.8	75.9	79.9	97.1	101.2	90.8	110.8	102.9
Demand deposits	46.9	74.8	86.3	100.9	95.2	100.7	91.2	102.9
Somali National Bank	5.5	15.3	23.7	28.6	26.6	34.5	30.9	29.7
Commercial banks	41.4	59.5	62.6	72.3	68.6	66.2	60.3	73.2
Quasi-Money	12.3	17.8	20.8	24.3	27.6	28.1	30.4	37.3
Somali National Bank	1.0	1.3	1.8	2.9	4.7	4.2	6.5	9.5
Commercial banks	11.4	16.5	19.0	21.4	23.0	23.8	23.8	27.7
Commercial Bank Reserves	18.8	25.5	22.5	24.6	18.3	9.3	19.2	10.7
Commercial Banks' Credit from Somali National Bank	1.2	0.5	2.1	0.7	3.1	3.1	3.1	0.2

Source: International Financial Statistics: April, 1968.

b) Foreign trade and payments

Up to independence the two regions of the Republic had two different currencies and systems of trade and payments. The general pattern existing in sterling area countries prevailed in the north. Imports valued at less than Sh. 5,000 did not require licences while for imports in excess of this amount they were freely granted, particularly if purchases originated from commonwealth countries. The system in the south dated back to 1955 and preferential treatment was accorded to Italian imports with licences generally required from other countries. Capital transfers and other remittances were subject to a permit system but were granted liberally up to certain limits. Private compensation deals were permitted up to Sh. 15,000 in the Mudugh and Migiurtinia regions.

A major policy objective after independence was the unification of the two separate systems of trade and payments. The first step towards this was taken with the introduction of the Somali shilling in the north followed by a single national customs tariff. And finally, a new integrated system of trade and payments was introduced. (1) The general principle underlying the new system is that all economic transactions with foreign countries are on a non-discriminatory basis.

The main purpose of exchange control in Somalia is to prevent unauthorised or disguised capital outflows; secondly, to assist the fiscal authorities in detecting tax evasion. It is well known that internal fiscal regulations are lax and do not adequately tap the more dynamic sectors of the economy more especially the foreign enclaves. Up to 1966 there was no effective coordination between the revenue authorities and the Somali National Bank to check the consistency of applications for remittances abroad with income declarations; thirdly, to enable the exchange control authorities to provide comprehensive statistical data to those responsible for the formulation of trade and exchange control policies. One of the main handicaps encountered by the licensing authorities in evolving meaningful trade and exchange control policies is the lack of precise and detailed information on the structure of imports and payments.

---

(1) **Law No. 9, 29 October, 1964.**

These in brief have been the main long term goals of the exchange control department of the Somali National Bank since its inception in 1965.

Somalia's foreign trade has fluctuated greatly since independence. Trade statistics on the basis of customs records show somewhat different trends than those compiled from exchange control data on which Somalia's balance of payments estimates are based; these stem from differences in valuation, coverage and timing.

Somalia has incurred sizeable trade deficits since independence and their magnitude has increased continuously from 1960 to 1964. In 1965 and 1966 this trend was reversed. The position according to customs data is given in the table below:

Trade deficit and the percentage of imports covered by exports

(Sh. million)

End of year	Exports (fob)	Imports (cif)	Deficit	Exports as percent of imports
1960	164	216	52	86
1961	188	230	42	82
1962	180	270	90	67
1963	227	319	92	71
1964	258	391	133	66
1965	237	354	117	67
1966	233	300	67	73

Source: Customs records.

A major factor responsible for the improvement of the balance of trade since the end of 1964 has been the restrictive credit policy pursued by the Somali National Bank. Improvement would have been more marked if rising exports had been maintained. In interpreting this trend, several factors other than the effect of credit policies should, however, be scrutinised: import figures include grants in kind as well as tied imports under loan agreements for development projects; grants in kind and particularly famine relief shipments of food and medicinal requirements tend to rise during drought years; loan financed developmental imports showed steady increases up to 1965 but tapered off thereafter due to the slowing down of certain projects. Available data do not permit a complete separation of these items and hence it is impossible to estimate the trade deficit arising out of purely commercial transactions.

Annual increases (+) and decreases (—) of imports and exports since 1960 are as follows:

Annual increases (+) and decreases (—)
of imports and exports since 1960

(Sh. million)

End of year	Imports	Exports
1960	— 4	+22
1961	+14	+24
1962	+40	— 8
1963	+49	+47
1964	+72	+31
1965	—37	—21
1966	—54	— 4

Source: MPC (Ministry of Planning and Co-ordination)

Exports (fob) by main commodity groups and as percentages of total export: 1960-1966

(value in Sh. million)

Commodity group	1960		1961		1962		1963		1964		1965		1966		1966 index of exp.
	Value		Value		Value		Value		Value		Value		Value		1960 100
Bananas	74	45	90	48	80	44	101	45	113	44	108	45	98	42	132
Livestock group	59	36	67	36	80	44	106	47	123	48	98	41	108	46	181
Live animals	41	25	52	28	67	37	91	40	108	42	81	34	96	41	234
Meat & products	3	2	3	2	2	1	2	1	2	1	2	1	1	...	33
Leather, hides & skins	16	10	12	6	12	7	13	6	13	5	15	6	11	3	56
Fish and products	5	3	4	2	6	3	5	2	3	1	1	1		1	60
Wood & charcoal	10	6	6	3	6	3	7	3	7	3	12	5	5	2	50
Other	16	10	22	12	8	5	8	3	12	4	18	7	21	9	131
Total	164	100	188	100	180	100	227	100	258	100	237	100	233	100	142

Source: Customs records.

Up to 1962, bananas were the most important export commodity. In 1962 earnings from this crop were equal to the proceeds from the group livestock and related products. In 1963, for the first time since freedom export proceeds from livestock and related products outstripped bananas. This development has continued except for the temporary setback resulting from drought in 1965.

Exports have risen since independence from Sh. 164 million in 1960 to a peak level of Sh. 258 million in 1964 or by over 57 per cent. This steady expansion was interrupted only marginally in 1962 in the wake of flood damage. Notwithstanding the impact of the 1965 drought on livestock raising and the marketing difficulties of the banana industry, total exports in 1966 were still some 42 per cent higher than in 1960.

Exports by country of destination, in value terms and percentagewise are shown on page 28.

Traditionally the banana market has been Italy where preferential treatment is still accorded. This concession was to have been discontinued by the end of 1967. It has, however, been further extended for two years due to transportation problems engendered by the closure of the Suez Canal. Livestock is marketed in Saudi Arabia, Aden and the UAR. Payments difficulties have in recent years hampered the expansion of livestock exports to the UAR market. Italy continues to remain the most important market for the nation's export, absorbing almost all the bananas exported from Somalia.

The breakdown of Somalia's imports by major commodity groups shows that the main imports consist of food products, textiles, motor vehicles and petroleum and account for over 60 per cent of the import bill. Imports of capital goods, primarily metal manufactures and machinery are relatively small. The total of the groups cereals, cereal products, coffee, tea, beverages, tobacco, edible oils and fats account for around a third of total imports. Thus, out of a total import bill of 300 million in 1966 these groups accounted for Sh. 94 million or 31 per cent. This is a clear indication of the advantages to be derived from import substitution in these sectors.

Imports by country of origin indicate that the share of Italy which accounted for 32 per cent in 1960 fell to 25 per cent in 1964 but recovered threafter. Italy continues to remain the largest source of imports. In absolute terms, imports, from this source have risen continuously from Sh. 69 million in 1960 to Sh. 101 million in 1965. This was interrupted in 1966 when they fell to Sh. 95 million.

The U.S.S.R. has emerged as an important source of imports since 1962. This trend is directly connected with the disbursements of credits from that country under the economic cooperation agreement of 1961. Imports from this source increased significantly in 1963 and 1964 as compared with 1962. In 1965 and 1966 they fell due to the slowing down of deliveries for U.S.S.R. assisted development projects. The major items of imports from the Soviet Union at present are petroleum products. The sale proceeds of these commodities are used to meet the local costs of Soviet assisted projects. The increase in imports from West Germany and the U.S.A. are also partly connected with aid programmes. In the case of the USA the implementation of the special letter of credit procedure has been, to a large extent, the reason for the increase in imports. It is through this procedure that the local costs of USAID projects in Somalia are met. American imports are expected to increase further with the implementation of the Kismayu port and Mogadishu water supply projects, local costs of which will also be financed out of the special letter of credit. A recently concluded PL 480 loan agreement envisages the import of wheat flour and edible oils from the U.S.A. which are in addition to the imports financed out of the special letter of credit. Rice imports from Thailand rose from Sh. 7 million in 1960 to Sh. 30 million in 1964, but declined to some Sh. 9 million in 1966. This is partly explained by the switch over to other sources of supply and notably to the U.S.A. to take advantage of the special letter of credit facility. Trade with Japan was around Sh. 12 million in 1960, but almost doubled in value by 1966. Indications are that this trend will continue for there is now a direct shipping link between the two countries. The share of unclassified countries in Somalia's imports has increased significantly since 1964 and is to be explained by the new system of trade and payments introduced in that year. The system does not discriminate country or currency-wise and as a result goods from a number of non traditional sources are now entering the Somali market.

The traditional pattern of Somalia's balance of payments is characterised by huge persistent deficits on both marchandise and service transactions. During the period 1960-1963 these were covered by cash grants from Italy and the United Kingdom, and by the inflow of long term private capital, particularly by companies engaged in oil exploration. Hence, during this period, the overall balance of payments position was in surplus.

In 1964 this trend was reversed and the foreign payments position came under severe pressure, the resultant of a combination of circumstances some of which were purely transitional. The main factors were: termination of financial assistance from the United Kingdom in the first quarter of 1963; obligation to repay in convertible currency the outstanding balance over the swing limit in favour of Italy, upon the termination of the payments agreement with that country with effect from 30 June 1964; delay in the receipt of Italian budgetary aid; excessive credit expansion; speculative stockpiling of imports by traders due to uncertainties arising out of the delay in the implementation of the new law on foreign economic transactions; and significant increase in balance due to Somalia under a trade and payments agreement with the UAR. These developments resulted in heavy pressure on the freely disposable reserves of the Somali National Bank which was, therefore, compelled to draw on the IMF under two standby arrangements. They amounted to Sh. 34 million in 1964 and Sh. 40 million in 1965.

The position stabilised considerably during 1965 due to action initiated by the Bank: the use of moral suasion early in 1965 to limit credit expansion to the private sector; the discontinuation, from December 1965, of the repurchase of shilling notes from sources other than Aden; and the termination, on 20 June 1965 of the payments agreement with the UAR. Under this agreement there were no swing credit limits. It specified, instead, that at the end of each quarter, 25 per cent of Somalia's exports to the UAR be settled in sterling. Balances in this account were accumulating in favour of Somalia from 1962 mainly against livestock exports. At the time of the termination of the agreement such balances reached a peak of Sh. 34 million or almost the equivalent of the sum drawn from the IMF in 1964 to strengthen the foreign exchange reserves.

Early in 1966, the Somali authorities, in consultation with the Fund, outlined a comprehensive stabilisation programme designed to attain internal and external equilibrium. With the approval of the Fund an exchange tax of 3 per cent was imposed for one year and subsequently extended for a further year at a reduced rate of 1.5 per cent. In February 1966 the discount at which Somali shillings would be repurchased by the Somali National Bank was increased. This measure alone reduced the foreign exchange drain from the equivalent of almost Sh. 14 million in 1965 to a negligible sum in 1966. During the course of the year the position stabilized to an extent where no drawings were made under a third standby arrangement negotiated with the Fund in early 1966.

Subsequent standby arrangements were primarily designed to enable Somalia to repay drawings made in 1964 and 1965, since, in accordance with the rules governing the use of Fund resources, drawings have to be repaid within a period of three years. Although improvement in the external payments position continued into 1967, eventual discharge of the repurchase obligations must be met out of the nation's own resources. The ability to do so would depend not merely on the maintenance of an overal payments balance but on the achievement of a steady surplus over the next few years.

Exports by country of destination

(Value Sh million)

Destination	1960 Value	%	1961 Value	%	1962 Value	%	1963 Value	%	1964 Value	%	1965 Value	%	1966 Value	%	1966 1960 = 100
Italy	92	56	106	56	93	51	112	49	117	46	116	49	106	46	115
Saudi Arabia	27	16	32	17	42	24	60	23	65	25	58	24	71	32	274
Aden	21	13	22	12	28	15	31	18	35	14	35	15	31	13	147
U. A. R.	1	1	3	4	5	3	12	1	20	8	10	4	5	2	500
Iran	7	5	6	1	5	3	5	1	4	1	2	1	2	1	25
Kenya	6	3	2	1	2	...	1	...	1	...	6	2	5	2	83
U. S. A.	2	1	2	1	2	1	1	1	3	1	4	2	6	3	300
Other	8	5	15	8	2	2	5	2	3	5	6	3	4	2	62
Total	164	100	188	100	180	100	227	100	248	100	237	100	233	100	142

Source: Customs records.

Imports by major commodity groups

(*Value in Sh. million*)

Commodity group	1960 Value	%	1961 Value	%	1962 Value	%	1963 Value	%	1964 Value	%	1965 Value	%	1966 Value	%	1966 1960 = 100
Cereal & products	25	11	24	10	33	12	38	12	53	13	62	18	40	13	160
Fruits & vegetables	12	5	14	6	16	6	18	6	18	5	13	4	12	4	100
Sugar & products	10	4	9	4	15	5	14	5	27	7	5	1	9	3	90
Coffee, tea & cocoa	8	3	9	4	8	3	9	3	12	3	7	2	12	4	137
Beverage & tobacco	8	4	10	4	9	4	10	3	11	3	11	3	12	4	150
Animal and vegetable oils and fats	2	1	2	1	4	1	6	2	13	3	15	4	10	3	500
Petroleum & related products	10	5	11	5	14	5	14	4	17	4	16	5	16	6	170
Pharmaceuticals	4	2	5	2	4	1	5	2	7	2	6	2	7	2	175
Paper & products	4	2	4	2	4	1	6	2	6	2	7	2	19	6	475
Textile & clothing	35	15	48	19	47	18	46	14	50	12	33	10	39	13	111
Base metals	4	2	6	2	8	3	13	4	10	3	12	3	5	1	125
Metal manufactures	8	4	9	4	7	3	10	3	14	4	12	4	10	3	125
Lime, cement & building materials	3	2	3	1	5	2	4	1	7	2	9	3	5	2	166
Electrical machinery	15	6	5	2	6	2	11	3	12	3	9	3	8	3	53
Non-electrical machinery	10	5	13	5	14	5	29	9	31	8	47	13	14	5	140
Miscellaneous manuf.:	3	2	5	2	6	2	5	2	9	2	7	2	8	3	266
Transport: materials	30	11	16	7	22	8	33	10	42	11	26	8	20	6	60
Other	25	12	44	20	49	18	49	15	51	13	55	16	57	19	228
Total	216	100	230	100	270	100	319	100	391	100	354	100	300	100	139

Source: MPC

Imports by country of origin

(Value in Shs. million)

Country	1960		1961		1962		1963		1964		1965		1966		1966
	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%	Value	%	1960 100
Italy	68	32	76	33	81	30	89	28	98	25	101	29	94	31	138
U. S. S. R.			2	..	9	3	45	11	44	11	28	8	11	3	122 (a)
U. K.	38	18	30	13	23	8	28	8	50	13	22	5	26	9	68
Japan	12	5	16	7	20	8	21	6	25	7	19	5	23	8	192
India	18	8	21	9	18	7	15	5	16	4	8	2	8	3	44
Kenya	15	7	9	4	12	4	17	5	27	7	24	7	8	3	53
U. S. A.	9	4	10	4	22	8	13	4	12	3	18	5	22	7	244
Thailand	7	3	6	3	9	3	13	4	30	8	17	5	12	3	128
Iran	5	3	5	3	8	3	12	4	12	3	17	3	14	5	280
Aden	7	3	9	4	10	4	9	3	16	4	16	5	11	4	157
Ethiopia	7	3	7	3	9	3	10	3	6	2	7	2	10	3	142
U. A. R.	1	1	8	4	10	4	7	2	5	1	1	...	3	1	308
West Germany	1	...	2	1	4	1	5	2	8	2	11	3	14	5	700
Arabia	1	1	3	2	6	2	2	2	2	1	2	2	5	1	300
Czechoslovakia	...	...	2	1	4	1	5	2	2	1	2	1	1	...	50 (b)
Ceylon	3	1	3	2	3	1	1	1	3	1	2	1	5	2	166
Singapore	...	...	...	...	2	1	3	1	4	1	4	1	5	2	250 (a)
Other	25	11	22	7	21	9	21	6	32	9	56	16	35	12	140
Total	216	100	230	100	270	100	319	100	391	100	354	100	300	100	139

Source: MPC

(a) Refers to base 1962.

(b) Refers to base 1961.

Balance of Payments 1961 - 1967

(*Sh. 'million*)

	1961		1962		1963		1964		1965		1966		1967	
	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.
Goods and Services	221	327	189	407	248	404	266	501	300	514	277	423	283	391
Merchandise	175	249	149	275	199	315	215	421	240	410	216	319	209	309
Transportation & Insurance	2	11	1	20	1	20	1	17	1	12	1	18	3	18
Travel	3	10	3	17	5	16	7	21	7	20	5	14	5	14
Investment income	...	3	6	7	3	3	4	2	1	2	2	8	3	4
Government n. i. e.	27	44	25	79	34	12	36	37	46	65	43	48	42	29
Other services	13	10	5	9	6	8	3	3	5	5	10	6	21	17
Transfer Payments	136	29	224	26	132	27	106	23	130	19	82	11	52	12
Private transfer payments	19	29	35	25	20	27	7	22	6	19	8	11	17	12
Official donations	117	—	189	1	112	—	99	1	124	—	74	—	35	—
Long-Term Capital	13	—	37	—	78	—	104	—	87	—	76	—	63	—
Private investments	14	1	30	—	24	22	26	1	15	3	13	—	14	2
Government borrowings	—	—	9	—	75	—	79	—	76	1	66	3	57	4
Shillings liabilities to U.S. Government	—	—	—	2	1	—	—	—	—	—	—	—	—	—
Total (A through C)	14	—	17	—	27		—	18	—	16	1	—	—	3
Short-term capital	23	—	—	31	—	6	—	9	—	10	—	1	—	—
Private short-term	—	—	—	—	4	11	—	10	—	10	—	2	—	—
Government borrowings from banks	—	—	—	17	—	—	—	—	—	—	—	—	—	—

(continued)

Balance of Payments 1961 - 1967

(Sh. million)

	1961		1962		1963		1964		1965		1966		1967	
	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.
Liabilities to Italian Postal Administration	17	—	—	17	—	—	—	—	—	—	—	—	—	—
Withdrawal of East African Shillings	15	—	—	—	—	—	—	—	—	—	—	—	—	—
Monetary movements	—	53	17	—	—	19	69	—	21			11	13	—
Legal currency cover	—	35	—	—	—	17	28	—	—	1	—	33	8	—
Gold subscription to IMF	—	—	—	13	—	—	—	—	—	—	—	7	—	—
Foreign currency subscription to IBRD, IDA, IFC, ADB			—	2	—	—	—	—	—	3	—	—	—	2
Other foreign exchange	—	35	75	—	—	17	28	—	2	—	—	26	10	—
Payments Agreements balances	4	—	17	—	—	24	—	10	—	22	4	—	9	—
Assets	—	—	—	4	—	11	—	11	—	12	3	—	5	—
Liabilities	4	—	21	—	—	13	1	—	—	10	1	—	4	—
Freely disposable foreign exchange	—	22	—	—	22	—	17	—	4	—	11	—	1	—
Somali National Bank	....	....	—	9	22	—	12	—	4	—	8	—	5	—
Commercial banks	....	....	9	—	—	—	5	—	—	—	3	—	—	4
Drawings from the IMF	—	—	—	—	—	—	34	—	40	—	7	—	—	5
Net Errors and Omissions	1	—	—	3	—	2	—	12	5	—	12	—	—	10

Source: Somali National Bank.

c) Foreign indebtedness.

Somalia's international indebtedness has assumed important dimensions since independence and as such deserves critical study with an aim of introducing certain fundamental reforms.

At present, total foreign debt negotiated or under negotiation by the government is approximately a billion shillings of which a part has been utilised or is under utilisation. As in many countries of the developing world and for a variety of reasons, the nation has not met its repayments commitments in full during a specified time. In 1967 and 1968 the government earmarked 1.4 and 3.4 million shillings respectively out of budgetary funds for meeting foreign debt obligations.

Financial resources necessary to meet debt repayments should emanate from the following sources: allocations from budgetary sources; new forms of taxation; net revenue of projects financed out of loans and additional borrowings on reasonable financial terms.

It must not be overlooked that budgetary funds are a necessary but not a sufficient condition for debt repayment. The reason for this is that all such foreign debt commitments must be reimbursed in foreign currencies save in the case of those loans where agreements stipulate repayment in kind. This, however, implies either a deflection of existing export resources or the supplementary generation of additional exports. It would, of course, be feasible to make such repayments in Somali shillings, but there are upper limits which could be embodied in the payments agreements concerned. However, they would in any event be minimal in relation to national repayment requirements.

Some of the loans obtained by Somalia since independence were used to finance investments which did not contribute directly to consolidation of national debt servicing capacity; major capital allocations which were destined to contribute directly to raise productive capacity either did not materialise, or in cases where they did were not operationally effective.

For the forseeable future Somalia's economic growth will turn largely on foreign financing and it is, therefore, of seminal significance that the nation's international creditworthiness be preserved. In the past, problems of debt servicing have not received the attention which they fully merit. It is the concern of the current Programme to appraise the overall problem of foreign debt management because of its impact on national economic development. Administration of Somalia's public debt (at present almost exclusively foreign) falls neither within the legal ambit of any specific ministry nor of the central bank. As a result of this incongruous situation the responsibilities involved are not clearly demarcated on an institutional basis. In conformity with international banking practices it would be possible for the government to regularise this state of affairs by directing the Central Bank to undertake the commitment inherent in the Bank's Constitutive Law and thereby assume integral responsibility for foreign debt management.

Adverse repercussions of existing institutional anomalies have often resulted in foreign loan agreements being negotiated on a multitude of terms and often under disadvantageous conditions with little or no reference to their overall repercussions and repayment schedules. Moreover, loan agreements have been negotiated on an *ad hoc* basis with hardly any regard to coordination. Close and continuous coordination between economic ministries and the Central Bank should be maintained on all questions pertaining to external finance since it would avoid deleterious duplication of effort and conflicting decisional powers. It is imperative that henceforth the prevailing legal framework should be globally restructured to permit centralisation of loan negotiation to fall within the exclusive ambit of the Ministry of Planning and Coordination. This would contribute to the maintenance, within a single institutional body, of complete and coherent records of loan agreements, revisions, amendments, protocols, contracts, etc.; it would have the additional advantage of permitting an immediate and commanding overview of projects which have been initiated with foreign loans.

As a result of the haphazard manner in which past loan agreements were bunched, there are sizeable variations in debt service commitments from one year to another with concomitant adverse effects on the national economy. (1) Projections suggest that the zenith of debt repayment will be reached in 1978 and will be scaled down in subsequent years reaching a tolerably low point in 1984. These heavy financial burdens can be mitigated exclusively by renegotiation and rescheduling.

---

(1) It is appropriate, in this connection, to recall the timely utterance made in Somalia's First Five Year Plan «...... Some of the loans that have already been promised are medium term rather than long term, the repayment liability would begin at a fairly early date. It is necessary that a substantial part of the additional finance that is required for the Plan should be obtained in the form of grants and very long term low interest loans ...... so that the aggregate repayment liabilities in the near future remain small. It should then be possible for the country to service a few long term hard loans». **First Five Year Plan, p. 153.**

It is clearly understood that the precise nature of concessions to be sought from individual creditors is a matter of political decision. Broad guidelines, however, may be suggested so as to reduce the service burden to manageable financial limits. Such policy decisions must weigh the possibility of: reduction or waiver of interest payments; conversion into a grant of the whole or part of a loan incurred in a project, particularly so in the case where the project reveals no symptoms of materialising as originally envisaged; extension of grace and repayment periods; and rescheduling of instalment payments in line with national financial availabilities.

Effectiveness of a successful debt management policy must, perforce, begin with the viability of projects financed from loans and their consequent capacity to make a direct contribution to debt servicing. As a corollary, this implies that comprehensive technical and financial feasibility studies be undertaken prior to project initiation. In those cases where the grant or loan element of the local cost component is tied to imports and sales of a given commodity, it has been discerned that there is little or no synchronisation between local costs required for the project and shillings generated by the sales of such commodities. A more definitive solution to this problem would lie in building up a sizeable local counterpart fund which could buttress external financing of a given project. The building up of this financial buffer stock would, therefore, contribute to ensure the smooth and continuous implementation of projects up to the point of completion.

It has been acknowledged that one of the most striking deficiencies in foreign debt administration is the absence of any regulatory legal mechanism. There is also no special fund into which designated state revenues could be credited and from which commitments could be met as they fall due. Constitutional procedures thus far have not been rigorously adhered to in certain negotiated loans, and it is urgent that such adherence be enforced.

One of the glaring problems that has bedevilled national development has been the paucity of local counterpart funds on a scale commensurate with project needs. It has been observed that certain projects have been rendered inoperational due to several bottlenecks in meeting local labour and other costs which were a small fraction of total costs. It is germane at this point to reiterate the pointed observations of the First Five Year Plan:

> «The army is creating a reserve force which, apart from its role in defence, will be available for implementing development projects. The reserve personnel will be given training in certain skills and will work under the supervision of qualified technicians. It can be used for land clearance, and for agricultural operations. The army with

> its excellent organisation and disciplined manpower can perform these tasks efficiently and economically. The Plan proposes to make full use of the reserve army for development work, without adversely affecting its defence potential. This would reduce the real cost of defence to the country. Thus in peacetime the army will be waging a war against poverty». (1)

These words have not lost their relevance for the Short Term Development Programme, for the army can become a major historic agency for social and economic change. Apart from diminishing local counterpart costs and thus attenuating the debt burden, it would be contributory to the solution of the attendant organisational problems engendered by migratory labour.

---

(1) op. cit. P. 146.

Chapter 4.

PUBLIC FINANCE

The major problem in fiscal affairs in the two regions of the Republic, even prior to independence, was that ordinary internal revenues were heavily dependent on import duties and inadequate to sustain basic expenditures. Chronic deficits were covered by cash grants of the two metropolitan powers.

In the south, the Trusteeship Administration introduced, in 1956, a system which distinguished between the government budget and that of the Trusteeship Administration, the objective being to engender a sense of fiscal responsibility. During the Trusteeship era indirect taxes, in the south, normally accounted for three quarters of ordinary revenue. The share of direct taxation was marginal and efforts to extend it proved disappointing.

To prepare the Somali authorities to deal effectively with budgetary problems in the north, the Colonial Office related expenditures for social and administrative purpose to revenue. Although revenues increased steadily (with customs and excise duties accounting for almost four-fifths of total revenue), U.K. financial assistance was called for due to rising expenditure. This was provided in the from of direct budgetary support as well as grants for specific projects financed by the Colonial Development and Welfare Fund and by the Army Works.

The first step towards the integration of public finance in the two regions was made in 1961 with the appearance of a unified budget. Basically, this unification consisted of aggregating expenditures and receipts of the two regions, although revenue sources still continued to be based on different tax and tariff structures.

In April 1963 a new tariff schedule was introduced designed to achieve the following: integrate the tariff structure; raise overall revenue to offset U. K. budgetary support which Somalia had now renounced; maintain a low level of duties on articles of mass consumption and relatively higher ones on luxury items; stimulate import substitution of basic commodities, i.e., salt and soap by protective duties, reduce duties on capital and transport equipment and basic raw materials to encourage development in the private sector. A common income tax came into effect in 1963.

Prior to 1966, central government's operations were split between an ordinary budget and a special budget introduced in 1962. The latter consisted of expenditures for economic and social development and certain extraordinary expenditures; receipts included transfers from the ordinary budget, borrowings and grants as well as non-capital expenditures. Consequently the demarcation line between the two budgets on current and capital expenditures was blurred. Further, the special budget included only capital expenditure which, directly or indirectly, required government financing in one form or another. It excluded investment expenditure financed entirely from foreign grants or loans and to that extent was not an index of the total development effort.

In 1966, the special budget was discontinued and a unified budget introduced; it envisaged a significant increase in expenditure over the 1965 ordinary budget which had frozen expenditure at virtually 1964 level. Several new measures were proposed to meet the increased expenditures.

An extensive tariff reform proposed in 1965 would have increased import and export duties. Although the reform was rejected by the National Assembly the government obtained special powers to enact by executive action, any fiscal measures that were required to cover 1966 expenditures.

Operations of the central government dominate Somalia's public finance, with revenues largely derivable from taxes on international trade accounting for more than half of total revenue. This structure is, indeed, symptomatic of Somalia's level of development.

Another segment of the public sector includes corporate bodies with varying degrees of autonomy: the Somali National Bank; Credito Somalo; Ente Nazionale per il Commercio Estero (ENCE) and the Port Authority which transfer a part of their profits to the government; the tobacco and match monopoly which is part of the Ministry of Finance; the Agricultural Development Agency and the Livestock Development Agency whose operations are financed with government budgetary funds, but who, it is hoped, will eventually be self financing.

Municipalities constitute the third element. Regional governors and district commissioners are appointed by and operate with funds provided by the central government. Municipalities are administered by elected councils and are, by and large, self financing. Their sources of revenue and rates are statutorily determined and any variations in these rates must require the approval of the Minister of Interior.

Internal financial problems stem from structural weaknesses in the fiscal system. In the past, budgetary deficits have been covered by foreign grants but since these are being progressively reduced, balancing the budget out of internal resources assumes the highest urgency. Restricting the expenditure programme to match available resources is politically difficult and economically unrealistic. Yet the revenue system is structurally unadapted to the needs of growth in expenditure. Heavy reliance is placed on indirect taxation, which affects the purchasing power of the lower income groups. To be sure, with a persistent deficit in the balance of payments, this heavy dependence on import duties poses a dilemma to the internal revenue authorities: if imports are curbed, revenues fall and if they are permitted to rise government revenue is strengthened at the expense of a deterioration in the balance of payments. The need for structural reform will further be reinforced by the creation of import substitution industries. This is a problem which confronts all developing countries whose fiscal structure is comparable to that of Somalia. Indeed economic development implies not merely a structural change of the economy but, equally and more profoundly, a structural change in fiscal organisation and management.

The Short-term Programme proposes the rigorous enforcement of the following measures to ensure that a beginning be made in proper financial management a complete annual audit of the budget; establishment of a permanent bribery commission; creation of an intelligence unit in the Treasury; review of existing legislation relating to tax exemption; publication in the Official Bulletin of a list of income tax payers with amounts paid; a radio telephone link between Mogadiscio and all customs points; patrol of border and coastal areas; an up to date register of dhows; withdrawal of exemption facilities from customs duties and substitution of a system of refunds; survey of business establishments throughout the country; updating a register of house owners; a comparison of outward exchange remittances with declared incomes; enforcement of the requirement that registered traders return their import licences upon expiry; refusal of licences for commercial franco valuta transactions; complete audit of import duty collections on a continuing basis; investigation of the role of monopolies as an inducement to smuggling; screening of customs revenue collectors; the framing of agricultural tax legislation.

The long term solution to Somalia's domestic financing of economic development lies in the overhaul of the tax system. Integral revamping of enforcement machinery and the administration of existing taxes shall, perforce, be the immediate concern of the state.

One of the conspicuous features since independence has been the growth of expenditure and revenue.

On the expenditure side, the sharpest order of increase was recorded for defence and police, followed by community and economic services, general administration and social services. Expenditure on defence and police have more than doubled since independence.

The expenditure breakdown shown on page 43 also suggests that the share of major categories have more or less been constant or declined except defence and police which have risen from 27 to 32 per cent. It is noteworthy that almost the entire budget is allocated to non productive expenditures, and in this respect bears a parallel with many African budgets. The share earmarked for commodity output is almost negligible as seen in the budgetary allocations for agriculture and livestock. Although agriculture and livestock constitute the backbone of Somalia's economy in terms of income and employment, it receives a mere 4 per cent of total allocations. Similarly, as has already been emphasised, Somalia which has, perhaps, the lowest enrolment ratio in the African region continues to siphon a trifling share to education. The conclusion is inescapable: the educational gap which already separates Somalia from most African countries will continue to widen. Significant in this respect is that budgetary allocations to education are also amongst the lowest in the African region and well below the Addis Ababa Conference targets. In comparison, Zambia is aready spending 6.5 per cent of its gross domestic product on education — the highest in the world. (1)

Since independence the nation has continued to rely excessively on external sources of assistance. Understandably Somalia must continue to require foreign assistance for some time, but efforts must henceforth be strenuously and continuously directed to a much greater degree of financial self reliance; in this respect the initial starting point is revision of budget priorities.

Revenues have also more than doubled in the period under review and the most pointed increases have been recorded by the tobacco and matches monopoly followed by the sugar tax and taxes on international transactions. A cause of considerable concern is that taxes on the external sector are based on very wobbly foundations since they can fall victim to import substitution industries, which is a normal corollary of industrialisation.

---

1) Republic of Zambia **First National Development Plan, 1966-1967** Lusaka, page 60.

The present revenue classification does not provide a systematic breakdown into direct and indirect taxation for the period under review, but available indices show that indirect taxation accounts for the bulk of taxes collected.

Efforts should be directed, as in the case of expenditure, towards reshaping the revenue side of the budget in terms of social equity as well as to meet the pressing claims of economic growth and structural change.

In the period under review, the nation has been afflicted by chronic deficits which have been covered by external assistance. Although they have declined in recent years, foreign assistance still continues to meet approximately 10 per cent of the shortfall.

Classification of ordinary budget expenditure

(million shillings)

	1961 Actual	1962 Actual	1963 Actual	1964 Actual	1965 Actual	1966 Revis. Budg.	1967 Revis. Budg.	1968 Orig Budg.
General administr.	**54.1**	**55.5**	**67.7**	**68.5**	**74.7**	**96.8**	**93.2**	**84.9**
Presidency	0.9	1.0	1.2	1.5	1.0	1.0	1.0	1.0
National Assembly	3.2	4.3	4.2	4.3	4.2	4.8	5.0	5.2
Presidency Council of Ministers	9.6	10.0	13.6	11.9	10.8	20.6	18.8	11.6
Foreign affairs	8.9	6.7	8.1	9.1	9.4	9.9	10.4	9.7
Interior	15.9	14.6	15.8	19.0	23.3	19.1	15.9	16.5
Justice & R. A.	2.5	2.3	2.6	2.7	2.7	3.7	4.7	4.8
Prisons	2.3	2.8	3.4	3.0	3.0	3.8	4.3	4.1
Finance	5.9	6.1	11.7	8.8	11.9	23.1	21.5	21.4
Central services	5.0	7.6	7.1	8.3	8.5	10.7	11.7	10.8
Defence & police	**43.7**	**48.1**	**55.9**	**67.1**	**64.6**	**74.4**	**82.6**	**90.2**
Defence	22.6	26.4	32.0	38.7	36.9	46.4	52.2	59.6
Police	20.0	20.2	21.7	25.0	24.8	28.0	30.4	30.5
Customs guards	1.1	1.5	2.2	3.5	2.8			
Communic. and Economic services	**38.5**	**26.6**	**27.2**	**29.1**	**29.2**	**50.9**	**59.1**	**66.0**
Public works	32.0	20.4	20.5	21.7	21.4	23.3	25.2	27.5
Transport & communication						13.3	14.8	14.9
Information	2.3	2.1	2.2	2.5	2.6	4.3	5.2	4.9
Agriculture	3.6	3.6	3.8	3.8	4.4	8.5	10.1	11.5
Industry & commerce	0.6	0.5	0.7	1.0	0.8	1.5	2.2	0.9
Planning & coord.							1.6	6.3
Social services	**28.6**	**27.9**	**29.6**	**32.9**	**30.9**	**35.2**	**37.2**	**40.4**
Education	10.1	11.7	12.2	13.4	13.4	16.8	18.9	18.5
Health & labour	18.4	16.2	17.4	19.6	17.5	18.4	18.4	21.8
Total	164.8	158.0	180.3	197.6	199.4	257.3	272.1	281.6

Source: Official data.

Annual percentage movements of ordinary expenditure by main categories

(1961 = 100)

	1962	1963	1964	1965	1966	1967	1968
General administration	103	125	127	138	179	172	157
Presidency	111	133	167	111	111	111	111
National Assembly	134	131	134	131	150	156	163
Presidency Council of Ministers	104	142	124	113	215	196	121
Foreign affairs	75	91	102	106	111	117	109
Interior	92	99	120	147	120	100	101
Justice & religious affairs	92	104	108	108	148	188	192
Prisons	122	148	130	130	165	187	178
Finance	103	198	149	202	392	364	363
Central services	152	142	166	170	214	234	216
Defence and police	110	128	154	148	170	189	206
Defence	117	142	171	163	205	231	264
Police	101	109	125	124	140	152	153
Customs guards	136	200	318	255	—	—	—
Community and Economic services	69	71	76	76	132	154	171
Public works	64	64	68	67	73	79	86
Transport & communication							
Information	91	96	109	113	187	226	213
Agriculture	100	106	106	122	236	281	320
Industry & commerce	83	117	167	133	250	367	159
Planning & coordination							
Social services	98	104	115	108	123	130	141
Education	116	121	133	133	166	187	183
Health and labour	88	95	107	95	100	100	119
Total	96	109	120	121	156	165	171

Source: Estimated from official data.

Percentage distribution of ordinary expenditure by main categories

	1961	1962	1963	1964	1965	1966	1967	1968
General administration	33	35	38	35	37	38	34	39
Presidency	1	1	1	1	1	...	...	...
National Assembly	2	3	2	2	2	2	2	2
Presidency Council of Ministers	6	6	8	6	5	8	7	1
Foreign affairs	5	4	5	5	5	4	4	4
Interior	10	9	9	10	12	7	6	[illegible]
Justice and religious affairs	2	2	1	1	1	1	2	2
Prisons	1	2	2	2	2	2	2	2
Finance	4	4	7	5	6	9	8	8
Central services	3	5	4	4	4	4	4	4
Defence and police	27	30	31	34	32	29	30	32
Defence	14	17	18	20	19	18	19	21
Police	12	13	12	13	12	11	11	11
Customs guard	1	1	1	2	1	—	—	—
Community and economic services	23	17	15	15	15	20	22	23
Public works	19	13	11	11	11	9	9	10
Transport and communication	—	—	—	—	—	5	5	5
Information	1	1	1	1	1	2	2	2
Agriculture	2	2	2	2	2	3	4	4
Industry & commerce	...	...	...	...	...	...	1	...
Planning & coord.	—	—	—	—	—	—	1	2
Social services	17	18	16	17	16	14	14	14
Education	6	7	7	7	7	7	7	7
Health and labour	11	10	10	10	9	7	7	8
Total	100	100	100	100	100	100	100	100

Source: Official data.

Budget Revenue

(million Shillings)

	Actual 1961	Actual 1962	Actual 1963	Actual 1964	Actual 1965	Actual 1966	Est. 1967	Est. 1968
Taxes on income and property	**9.4**	**7.8**	**10.0**	**11.2**	**17.8**	**16.0**	**16.4**	**16.4**
Income and profit tax	8.7	7.4	9.1	10.6	12.2	14.0	16.0	16.0
Other	0.7	0.4	0.9	0.6	5.3	2.0	0.6	0.4
Taxes on production, consumption & domestic transact.:	n a	n a	n a	**40.8**	**42.6**	**55.4**	**63.7**	**68.6**
Tobacco & matches monopoly	8.9	10.3	15.3	20.6	20.5	22.6	30.0	30.0
Sugar tax	11.3	13.6	10.3	19.1	20.9	31.2	32.0	37.0
Other	na	na	na	1.1	1.2	1.6	1.7	1.6
Taxes on internal transactions	**61.3**	**72.3**	**87.8**	**101.1**	**90.3**	**109.9**	**129.5**	**134.0**
Import duties	50.8	62.1	70.1	85.6	70.6	71.2	81.3	80.0
Export duties	10.5	10.2	13.8	15.5	15.1	10.9	16.2	15.0
Administration & statistical tax	—	—	—	—	—	14.6	16.0	22.0
Other	...	...	3.9	...	4.6	13.2	16.0	17.0
Other taxes	na	na	na	**12.6**	**13.1**	**13.3**	**18.1**	**16.1**
Motor circulation	na	na	na	1.1	1.4	1.6	2.5	2.0
Stamp & registration	na	na	na	7.6	8.1	9.4	12.7	11.2
Consolidated tax on oil companies	na	na	3.5	3.1	3.0	2.0	2.6	2.6
Other taxes and licences	na	na	na	0.5	0.5	0.3	0.3	0.3
Fees, service charges and fines	**11.6**	**14.2**	**10.4**	**9.6**	**10.5**	**12.3**	**14.7**	**15.1**
Property receipts	**2.1**	**3.2**	**2.4**	**1.4**	**1.5**	**5.0**	**4.3**	**3.6**
Other revenue & unclassified	na	na	**3.6**	**1.0**	**1.6**	**9.2**	**1.4**	**3.4**
Total revenue	123.6	142.7	150.5	177.7	177.5	221.1	248.1	257.1

Source: Official data.

Annual Percentage movement of ordinary revenue by main sources

(1961 = 100)

	1962	1963	1964	1965	1966	1967	1968
Taxes on income and property	83	106	119	189	170	175	175
Tobacco & matches monop.:	116	172	232	230	254	337	337
Sugar tax	120	91	169	185	276	283	326
Taxes on international transactions:	118	143	165	147	179	211	219
import duties	122	138	169	139	140	160	158
export duties	97	131	148	144	104	154	143
other	...	100	...	118	338	410	436
Fees, services, charges and fines	122	90	83	91	106	127	130
Property receipts	152	114	67	71	238	205	171
Total	116	122	144	144	179	201	208

Source: Estimated from official data.

Percentage distribution of ordinary revenue by selected sources

	1961	1962	1963	1964	1965	1966	1967	1968
Taxes on income and property	8	6	7	6	10	7	7	6
Tobacco and matches monopoly	7	7	10	12	12	10	12	12
Sugar tax	9	10	7	11	12	14	13	14
Taxes on international transactions	50	51	58	57	51	50	52	52
import duties	41	44	47	48	40	32	33	31
export duties	9	7	9	9	9	5	7	6
other	—	—	3	—	3	6	7	7
Fees, services, charges and fines	9	10	7	5	6	6	6	6
Property receipts	2	2	2	1	1	2	2	1

Source: Official data.

Budget deficits and percentage of expenditure covered by revenue

(million shillings)

Year	Revenue	Expenditure	Deficit	Percentage of expenditure covered by revenue
1961	123.6	164.8	41.2	75
1962	142.7	158.0	15.3	90
1963	150.5	180.3	29.8	84
1964	177.7	197.6	19.9	90
1965	177.5	199.4	21.9	89
1966	221.1	257.3 (a)	36.2	86
1967	248.1 (a)	272.1 (a)	24.0	91
1968	257.1 (a)	281.6	24.5	91

Source: Estimated from official data.

(a) Estimates.

Chapter 5

ADMINISTRATIVE FRAMEWORK

It is now universally recognised that the existence of an efficient administrative set up is a basic pre-requisite for the formulation and implementation of any viable development plan. Failure of most plans in the developing world have largely been due to manpower constraints combined with administrative inefficiency and outdated or deficient administrative structures. The success of a plan may be measured by the extent of implementation attained which, in turn, is predicated on the effectiveness of the administrative machinery at both the central and regional levels.

The planning process is multi-dimensional in that it embraces economic, financial, social and physical planning. Although conceptually these are separated in terms of policy, they are inextricably related. Health planning which, for example, is only a minor component of integral planning, necessitates in its economic aspects an assessment of manpower, foreign exchange and local costs requirements. The physical aspect would require the rational setting up of hospitals and dispensaries, water supplies, electric power and ultimately provisions for expansion which, in turn, would socially require demographic surveys on population trends and migration. The financial plan would include the capital and recurrent costs of health projects. What is true of health would hold for the other sectors also. At every phase of planning, coordination is required.

If a development programme is not to remain an exercise in sophisticated futility and a squandering of precious national resources, coordinated and disciplined efforts on the part of various ministries become a rigorous imperative. This implies that every ministry must envision its role as part of an interrelated process of planned development. Without such deliberate and disciplined striving to optimize the use of resources, the planning effort will simply degenerate into a scramble to maximize ministerial allocations and prestige in a series of anarchic un-coordinated projects and the financial waste inherent in such a course could be disastrous.

Notwithstanding some notable achievements in many fields, the overall performance of the First Five Year Plan has been below expectations. There were many factors that contributed to this end.

but perhaps one of the most salient deterrents to plan implementation was the inability of a weak administrative machinery to shoulder the added burden of development.

It is expected that in the period covered by the present Programme far reaching changes will have to be made. Details of these changes must obviously be blue-printed but the broad nature of such administrative and organizational imperatives are indicated here.

At present the country's administrative structure is greatly enfeebled and conspicuously marked by the absence of viable machinery for development planning. Whereas the Ministry of Planning and Coordination is the central organ of the Somali government, charged, in general, with the formulation of development plans and the coordination of developmental activities, it is the individual ministries that shoulder the initiation, preparation and implementation of sectoral programmes and projects. There are no units within the ministries specifically devoted to developmental planning and project implementation.

Up to the present, development oriented administrative norms and agencies have proved insufficient and perhaps even more distressing the structures inherited from the colonial powers have not been adapted to the requirements of effective national integration and accelerated economic growth.

The moment is therefore propitious for the setting up of planning units in all ministries. They should be staffed, for a start, with three or four dynamic persons of recognized technical competence whose main function would be to assist in the formulation of a development strategy, implementation of ministerial development programmes, preparation of follow-up and progress reports, and data collection for project identification. These units must also work in close conjunction with the Ministry of Planning and Coordination. It is also suggested that for each ministry, a ministerial planning committee should be set up consisting of the Minister, the Director General and departmental heads with their technical staff acting as advisers, with the Head of the Planning Unit as Secretary. The committee could then coordinate ministerial development activities, supervise the work of the planning unit, and determine the final proposal to be submitted to the Ministry of Planning and Coordination. Without the creation of such organs, the planning process will remain woefully fragmented and the formulation and implementation of even the public sector plans will be seriously impaired.

Another organizational defect has been the failure of the present administrative structure to reach directly the vast majority of the population who are nomads and seminomads and who are economically and socially significant. The present administrative structure does not extend beyond the district level which, in practice, implies that it is mostly confined to the major urban centres save for the occasional tours of District Commissioners. Successful formulation and implementation of development plans require maximum mass participation necessitating the establishment of viable administrative machinery capable of ascertaining the community's needs at every spatial level, guiding their efforts towards development and self-improvement. Under the colonial dispensation government administration was circumscribed to the preservation of law and order, tax collection, provision of a few basic services, and the enforcement of the political directives of the metropolitan powers with regional governors and district commissioners being exclusively the political agents of the central government. Crystallization and inflexibility have become the hall-marks of the system, for, after years of independence regional governors and district commissioners still continue to regard themselves as the political agents of the central government with a minor sense of responsibility towards the growth and welfare of areas under their jurisdiction.

Correctives are called for to bring these administrative structures into line with national development needs. It is, therefore, suggested that the present functions of the regional and district administrators should be re-defined to give priority to developmental matters. Organizationally, it might be advisable to designate all deputy governors at the regional level and assistant district commissioners at the district level as development commissioners and development officers respectively. These officers would be charged specifically with development functions. Such an approach, it should be emphasised, would not entail supplementary manpower outlays. It is of seminal significance that such development personnel should be technically qualified and growth oriented. It may also be suggested, given their newer proposed attributes, that they should fall within the competence of the Ministry of Planning and Coordination and not the Ministry of Interior.

In all regions and districts, development committees should be instituted under the chairmanship of the governor and the district commissioner respectively with senior officials of various ministries, representatives of local government bodies and local persons as constituent members. These committees could then be held responsible for imparting stimuli to self-help and community development activities in areas under their authority. Moreover, they could assist in the identification of suitable developmental projects, submitting their findings to the Ministry of Planning and Coordination.

At the village level, or at village group level the idea of a multi-purpose extension worker in agriculture, animal husbandry, public health, adult education, cooperatives, etc., might be given a trial run, for at such spatial levels operational costs for representatives of individual ministries may well prove unduly prohibitive. The degree of expertise required from such workers at this level is not high, and a short-term course could be organized for such selected workers prior to their assignments.

Integration of the former northern and southern systems of administration remains to be completed, although the basic objective of a single national administration with one civil service, one pay structure, and a single working unity with loyalty to the Somali Republic has been attained. The major enacted integrated laws include the Law on the Organization of the Government, the Law on the Organization of the Judiciary, the Civil Service Law, the Customs Law, the Citizenship Law and the Law on Local Administration and Local Council Elections, the Law on Political Elections, Public Order Law, the Water Law, the Law on the Organization of Regions and Districts, the Penal Code, the Criminal Procedure Code and the Law on Financial and Accounting Procedures of the State. These are impressive steps in the right direction, but much remains to be done; work on drafting and processing additional integrated legislation for enactment continues. The urgency, however, for completing this process of integration cannot be over-emphasized; and the proposed integrated laws now awaiting the ultimate decision, or those now being processed, should be expedited and, of course, carried into effect.

An analysis of the data collected by the Somali Institute of Public Administration in answer to a request that it study delegation of powers indicates that government machinery is very complicated, ponderous and ineffective. This is mainly because of excessive legalism involved in the most trifling decisions; and a lack of adequate delegation of authority to lower echelons of power. In a simple case as the recruitment of B or C grade employee, as many as 30 steps and a dozen different offices, including the Presidency of the Republic, are involved; one of these offices (the Establishment and Personnel Division) comes into the picture twelve times. Achieved results are disproportionate to the time, effort and financial cost not to speak of their inimical repercussions on human relations. To raise administrative efficiency commensurate with development needs it has been urged that various legal impediments placed on the executives should be dismantled, and that there should be a further decentralization and delegation of authority to the lower echelons of power.

Action to implement the first recommendation has yet to be finalized; the second recommendation cannot be implemented merely by issuing specific directives to the Directors General and from the latter to the Directors, because in the absence of any provision in the Civil Service Law for such delegation, the directives would not have the force of law until the Civil Service Law is amended. Since the Revised Civil Service Law has yet to be passed, the executive machinery of government continues to function in its traditional way.

The pivotal problem is not only to decide on therapeutic measures but to apply them. If both the cause and the effect of these disorders are to be remedied, the entire basis on which present administrative procedures rest should be modified so as to enhance maximum delegation.

Basic laws should also provide for the general exercise of authority; decrees should be designed to enable promulgation of general regulations within the limits set forth in these laws. However, the present tendency to require decrees for nearly all administrative actions is superfluous. Such action should be taken by ministerial decision within the authority granted by law and decreed by regulations. With this end in view, a committee should be set up to study existing laws and decrees and recommend ways in which they can be modified to enable such delegation, and eliminate the present escalation of and excessive reliance on, administration by decrees. -Once this study is achieved, the committee should, in consultation with the relevant ministries and departments concerned, explain the mechanism of delegatory power in each case and arrange for the necessary orders to be issued.

In a developing country early attention to the improvement of procedures, which can go some distance in achieving speed and economy in the despatch of public affairs, cannot be over-emphasized. As stated earlier, efforts should be directed to match the speed of decisional power on a scale commensurate with economic and industrial advance. In a situation where the needs for procedural reforms are many and varied and the manpower resources limited, rationalization of registry and filing operations can be an appropriate starting point and a practical contribution to sound administration. A tentative beginning in this direction has already been made.

A large proportion of civil servants have not yet received the fundamental education and specialized training to carry out their assigned tasks even on a minimal basis. Beyond that minimum, additional training must perforce be forthcoming to enable development projects to be efficiently staffed.

Wheras training is the onus of all senior officials, there must be coordinated planning of civil service training as a whole. In view of the dimension of specialised training so desperately needed, it would appear that an interministerial body would be more conducive to training efforts than would an individual unit such as the Directorate of Establishment and Personnel or the Institute of Public Administration. The Institute's present Advisory Council includes representatives of a number of key ministries. It would be more appropriate for this body to become a Civil Service Training Council and assume leadership for all civil service training activities.

To the greatest extent possible, civil servants should be trained in Somalia rather than abroad. Since costs will be less, scheduling can be more flexible, and it will be easier to relate the subject content to the realistic needs of Somali Administration. Advanced or higly technical training may necessarily involve study abroad, but, as a policy measure, civil servants should not be sent outside Somalia for any training which is available within the country.

Within Somalia, training should be provided through as many channels as possible. The facilities of the Ministry of Education and the University Institute should be used, especially outside regular office hours, and general and advanced training by the Institute of Public Administration should be quantitatively and qualitatively raised. Those ministries that do not have training officers or units should be staffed and programmes of internal training needs in consonance with ministerial commitments toward the development plan prepared. To assist ministries, the Institute of Public Administration should arrange courses for training instructors and other training staff.

Although nearly all groups and levels of the civil service need further training, during the Programme period certain priorities should firmly be established. Such priorities will include special training to improve managerial skills of higher public officials. Seminars, conferences, etc., may well prove more fruitfull than more formalized classes. A fundamental need exists for training of persons who are carrying out the clerical and financial operations of administration, i.e., general clerks, typists, stenographers and secretaries, and more emphasis should therefore be given to on-job rather than classroom training. Without efficient and properly trained personnel at such levels a development programme will be permanently impaired.

Another group whose training should be given priority consists of junior technical or skilled labour categories such as mechanics, artisans, laboratory personnel etc. In many countries training for such jobs is given in intermediate or secondary schools or in apprenticeship programmes, but in Somalia such training has been either unavailable or inadequate. Nearly all skills have been learnt on the job in an unorganised and haphazard manner. The ministries or government as a whole must provide refresher and upgrading training so that the physical aspect of development will be handled effectively.

In the final analysis, an administrative system is as good as the human agents who run it. The best organizational agency will cease to function if proper personnel practices and policies are absent or defective. A properly organized civil service should be based on principles of social justice, while maximising efficiency. It should have established procedures for recruitment according to ability and promotion according to merit. There should be provisions for disciplinary action, a stability of tenure of office and incentives for efficiency and loyalty. A system not embodying these basic characteristics functions at best marginally and will not achieve the goals and targets prescribed by national plans.

Personnel administration in Somalia does not fulfil these basic pre-requisites. To be sure, conditions are such that without urgent, drastic and integral reforms in these specific areas, other efforts at administrative amelioration and general plan implementation are bound to wither.

Currently political influence plays a major role in government employment and very little consideration is given to merit, experience or qualification. Proper discipline is lacking and rigid personnel regulations coupled with political influence have the effect of protecting the inefficient. The result is that government departments are overstaffed with untrained and unqualified people at every echelon of power. At the same time, employment stability rests on febrile foundations, salary payments are relatively low and irrationally structured and there are no pension, insurance or similar schemes from which civil servants could benefit. Consequently, morale is not high and efficiency is low.

Genuine attempts to reform the present structure must begin at the political level. As long as government employment remains the main, if not the unique, form of political patronage, it is wholly futile to bring about administrative reforms of any kind or consequently implement development plans.

As a first step, it is imperative that personnel administration should be shielded and removed from the realm of politics. Such a remorseless measure would require great courage, firm decisional powers and leadership by the national government. Once this been brought about, it should not be too difficult to create or activate existing machinery and procedures for effective administration. The beneficial consequences that would flew from such an audacious course of action would be nothing short of colossal.

A major reform that has already been triggered but which has not yet been passed is a revision of the Civil Service Law No. 7 of 15 March 1962. The revised draft of the Law is comprehensive and covers almost all facets of personnel administration, recruitment, promotion, transfer, discipline and termination of services. Undoubtedly the new Civil Service Law will be a big step forward in rectifying administrative abuses and it should be passed as soon as possible without any major changes. Two further steps initiated but not yet finalized are the draft law on Pension and Gratuities, and the work of the Civil Service Establishment Commission assigned to revise the present established posts and prescribe minimum qualifications and experience for specific duties. Finalization of these measures also remains to be speeded up.

The term «financial administration» straddles a multitude of topics such as budgetary accounting, auditing, savings, balance of payments, etc. Vast improvements of an organizational and procedural nature are urgently needed in all these fields.

Chronic budgetary deficits in the post-independence period are largely attributable to the malfunctioning of the tax machinery and studies have pinpointed their inefficiency. They are mostly understaffed with very junior, low paid and totally unqualified persons, and this is particularly true of the income-tax organization. Consequently, except from public servants, hardly any income tax is collected; corruption is rife and the processing of the few returns submitted for assessment is always two or three years in arrears. The government cannot continue to rely indefinitely on foreign financial assistance. It is the task of the nation to mobilize its national resources fully but a condition for so doing is the overhaul of the present structure of tax administration.

Customs, income tax, other direct and indirect taxes account for almost the entire tax revenue. There are serious problems of internal organization within each of these branches related to the setting up of procedures, allocation of office responsibilities, assessment and collection, internal audit and a coherent inspection system requiring human agents of established ability. In general, it may be stated that executive departmental responsibilities must be discharged not from within the Ministry but in the field. The Head of the Department should, in the physical sense, be detached from the Ministry, and function with a certain degree of autonomy.

A unified accounting system for the entire country has been laid down. Organizational arrangements for implementing the unified system and the training of accounts personnel necessarily require time. A beginning has now been made with the implementation of the unified system in 1967.

One of the characteristics of underdevelopment is the timidity of domestic private capital which seeks investment in riskless, non-innovating sectors like trade, housing and various similar outlets, where project returns are immediate and high. To increase the rate of economic growth, the government has had to establish certain industries in the public sector. Huge investments have also been made in many sectors. At the present juncture, essential industries which require investment on a scale which only the state can make must be run efficiently with rational price policies, and with their actual economic surplus being reinvested in future expansion. It is a truism to say that a project will ultimately succeed or fail on the strength of its management.

In Somalia not only public sector enterprises, but also certain autonomous agencies have been established to administer important sectors of our economic life. The normal organization of an agency, is a board of directors with a president, a general manager and a board of auditors. A supervisory committee consisting of a few ministers is also established with most executive functions vested in the general manager. In actual practice, however, the agency is unable to function in a genuinely autonomous manner.

In public sector undertakings, the membership of the board of directors leaves much to be desired. If a certain body is expected to function autonomously, it should be permitted greater leeway in its decision making powers. The general manager should be accorded the necessary authority to speed up operational decisions with no interference by the Board of Directors in the daily running of the agency or the undertaking. Once again there should be delegation of authority and flexibility of operation. Within the enterprise itself there should be delegation down the line; official duties and responsibilities must be reshaped and defined if economic performance and innovative practices are to be encouraged.

Chapter 6

AGRICULTURE AND RELATED ACTIVITIES

A. The Setting and Strategy of Development

a) Agriculture.

Somalia, with a total area of approximately 63.8 million hectares, has about 8 million hectares suitable for cultivation of which less than one million hectares are actually cultivated; most of this land is devoted to food crops under conditions of dry farming largely of a subsistence nature. The two important cash crops are bananas and sugarcane concentrated in the south where the Schebelli and the Juba flow. The inter-river area which lies between these two rivers is the most important agricultural region.

Land suitable for cultivation in the inter-river area is around 7.5 million hectares, of which nearly two-thirds are presently classified as marginal. There are also, in addition, over 12 million hectares within the area which receive more than 350 mm. of annual rainfall with a generally good stand of mixed grasses suitable for grazing.

Total estimated irrigation potential of the Schebelli and Juba is 240,000 hectares; of these only 40,000 are actually irrigated with the cropped area limited to about 15,000.

The north is less well endowed with water resources, with an average annual rainfall of 70-100 mm. The area suitable for farming, with rainfall ranging between 400-500 mm. per annum, is estimated at about 200,000 hectares, of which 100,000 are in the Hargeisa and Borama districts where dry farming has been traditional. Most of the remaining area is in Erigavo; a limited area in the northern low lands is devoted to grain farming with flood irrigation.

Agriculture in the Migiurtinia and Mudugh regions is largely confined to date palms owing to arid climatic conditions.

Somalia: Pattern of Land utilisation

Lands	*million hectares*	*per cent.*
Grazing	35.0	54.9
Cultivable	8.0	12.5
Forests	8.8	13.8
Other	12.0	18.8
Total	63.8	100.0
Cultivated	0.8	1.3

Source: M. P. C.

Fragmentary crop production statistics suggest an average annual output of foodgrains of 150,000 tons, almost wholly grown in the traditional-sector. This is supplemented by annual imports of about 30,000 tons. The main crops grown are sorghum, maize, legumes, sesame and cotton. The FAO agricultural survey discerned the following crop pattern in 1963, for the traditional sector in the inter-river area:

Estimated production of crops in 1963 — Inter-river area

(Traditional-agriculture sector)

Crop	*Estimated production (tons)*	*per cent.*
Maize	66,970	28.2
Sorghum	151,650	63.9
Cotton	7,160	3.0
Others	11,580	4.9
Total	237,360	100.0

Source: Estimated from FAO *Agriculture and Water Survey Somalia, 1967.*

While comparable figures are not available for the north, it is known that sorghum and maize are the main crops with legumes grown on a limited scale.

Traditional sector: Total agricultural land in the inter-river area is about 7.5 million hectares of which 941,400 are occupied by «traditional» agriculturists. Total crop area in 1963 was 537,400 hectares confined almost exclusively to the dry farming area. It is estimated that occupied land is distributed among 63,920 farms supporting 479,750 persons or nearly 7.5 persons per farm. There are approximately 17,000 farms with a total area of 80,000 hectares in the north. Assuming the southern average of 7.5 persons per farm, northern farms support 127,500 persons. Total number of farms in the traditional sector would thus be around 80,000 supporting about 600,000 persons.

Farm lands often belong to a group of persons of which the cultivator is a member; land tenure is, therefore, related to the traditional social structure. This contains an element of strength as well as weakness; the strength resides in the social consciousness of individuals and their preparedness to join in a common struggle; the weakness being the lack of incentive to develop land either for cultivation or for pasturing. While efforts will be directed to rectify the shortcomings in the land tenure system, it is possible to use the positive aspects of the present system to expand the cooperative movement. The feasibility of such a course is demonstrated by the efficient operation of some cooperatives.

Villages are the most characteristic feature of settled agriculture and they could form natural units of development. With suitable facilities and appropriate marketing organisation, a wide extension of village cooperatives would be feasible. Appropriate amendments to existing cooperative legislation is envisaged to foster the growth of the cooperative movement.

Traditional agriculture, even with improved organisation, would still continue to manifest its inherent weaknesses. Productivity is low and hence income is low, so that the absorptive capacity of the market, composed predominantly of farmers and pastoralists, is inhibited. Although export prospects for food grains are not so sanguine, there is considerable scope for import substitution since the present level of imports is about 20 per cent of requirements.

Plantation sector: The plantation sector is confined to the inter-river area in the south where controlled irrigation prevails; cultivation is limited to banana and sugarcane with increasing interest in grapefruit. Bananas and grapfruit are mainly grown on concession farms in the lower reaches of the Juba and the Schebelli. Sugarcane is grown on one estate in Johar, producing about 35,000 tons of sugar. The estate has a concession exceeding 25,000 hectares of which 8,000 are under irrigation and the area under sugarcane is about 5,000.

The concession area for banana plantations was about 50,000 hectares in 1964, of which nearly 10,000 were under banana and 7,000 under other crops. The remainder was either fallow, bush or grass. Between 1960 and 1965, banana production increased by nearly 73 per cent but this was almost entirely due to higher yields.

The major problem inherent in the plantation sector is the instability of an almost mono-culture economy based on bananas. Faced with increasing difficulties, there is a need for rationalising banana production and marketing as well as the pattern of cultivation in the irrigated areas where the plantations are located. Diversification, however, hinges on the expansion of irrigation facilities.

The problems of banana cultivation as well as prospects for cultivation of other cash crops, namely sugarcane, cotton and grapefruit are examined below.

Bananas: Bananas have been grown in Somalia since time immemorial by farmers living along the lower course of the Schebelli and the Juba. Up to the time of European colonisation, its contribution to the national economy was minimal. The first scientific field tests were made in Genale in 1912 and cultivation for export began in 1926 on an area of 46 hectares.

Exports ceased during the second war but were resumed at the end of 1946. The industry employs about 25,000 workers; on the assumption of three dependents per worker, roughly 100,000 persons are directly dependent on the crop. The market is presently confined almost wholly to Italy.

For purposes of marketing, most banana producers are grouped into two major cooperatives. The cooperative of producers of the Afgoi-Genale area in the lower Scebelli with about 170 members is known as the SACA, (1) while the producers' cooperative operating in the Juba consisting of about 30 members, is called the SAG, (2) An association composed entirely of Somali farmers SAS, (3) has also recently been set up and is exploring markets in the Persian Gulf area. Compared to SAG, members of SACA are generally small scale farmers. Partly on account of this and partly because of natural conditions, farm productivity in the Lower Juba is roughly twice that of the Afgoi-Genale area. SACA and SAG were previously federated into FEBAS (4). Shareholders of all three organisations were mostly banana growers. FEBAS negotiated quantities to be sold to the Italian Banana Monopoly which controlled imports into Italy and then distributed the quota between SACA and SAG. From the late fifties export quotas allocated to Somali growers were progressively raised. In the first quarter of 1968 the quota system was abolished.

---

(1) Società Azionaria Concessionari Agricoli.

(2) Società Agricoltori Giuba.

(3) Società Agricoltori Somali.

(4) Federazione dei Banancoltori.

When the Italian Monopoly ceased operations in early 1965 formal arrangements underwent a change. SACA and SAG are now responsible for the negotiation of export contracts, the «calling forward» of fruit at packing stations, grading and packing, arrangement of transport to the ports and loading. Sales proceeds are pooled on a regional basis and divided after deduction of handling and transport charges from the packinghouse, shipment charges and export duties. Distribution of SAG's sales proceeds is related to the grade of banana supplied by the producer. Farmers normally receive an advance on delivery to the packing plants, the balance being paid after the receipt of sale proceeds, involving a time lag of about two months.

Export sales are concluded primarily on the basis of long term contracts. In the recent past, with the exception of small quantities exported to Kuwait, Somalia's exports have been exclusively bought by two companies, COGIS (1) which deals with SACA and CIF (2) (a subsidiary of the United Fruit Company) which deals with SAG. Both companies had five-year contracts with the two producer associations, providing for purchases at f.o.b. prices; however, CIF's contract with SAG specified acceptance of quality c.i.f. at Italian ports. Following the closure of the Suez canal, these contracts were suspended.

Bananas continue to be Somalia's most important agricultural crop. Between 1960 and 1965 output rose from 91,000 to 157,000 metric tons. In 1966 both output and exports suffered a setback mainly due to the delay in finalising sales contracts.

Production picked up in 1967 and exports for the first half of the year increased by almost sh. 10 million as compared with the corresponding period of 1966. Closure of the Suez Canal interrupted this favourable trend. The first shipments made via the Cape were completely spoilt on reaching their destination. Larger, faster and better equipped ships were subsequently introduced which curtailed losses in transit to manageable proportions. By October, 1967, exports by volume recovered to normal levels. During the period when supplies from Somalia to Italy were interrupted, the shortfall was met by Latin American growers, notably Ecuador. As a consequence, Somalia is now confronted with more intense competition in its traditional market.

---

(1) Compagnia Generale Interscambi.

(2) Compagnia Italiana della Frutta.

Somali bananas have enjoyed preferential treatment in Italy for a number of years which mirrors the fact that they are not competitive in the international market. Although Somalia has lost its specific quota allocation, preferential treatment continues in the form of a reduction of Lit. 30 per kilo from the Italian consumer tax of Lit. 90 per kilo up to an import volume of 100,000 metric tons year. In addition, the EEC common external tariff of 20 per cent applied by the six Common Market countries protects Somali bananas from the competition of non-associate members. In view of the difficulties engendered by the closure of the canal, the preferential treatment will be accorded up to the end of 1969 when Somali bananas will have to face the full blast of international competition.

Somalia's share of world banana supply is slightly more than 2 per cent, almost exclusively marketed in Italy. Among European countries, Italy's per capita consumption of the fruit is lowest but the per capita rate of increase is perhaps the highest. In general, an expanding market in Italy and that of the other EEC countries is still available to Somalia. Further, the markets in the socialist countries, the Middle East and Japan have yet not been fully exploited. With a small share of the world market, a marginal increase in world demand can be turned into a substantial gain for a small supplier like Somalia, provided prices are competitive.

Conflicting opinions have been expressed regarding the industry's capacity to survive in a freely competitive market. What is noteworthy, however, is that Somali bananas have been able to absorb a reduction in the f.o.b. price per kilo of some 40 per cent during the period 1949-1963. Efforts are being continued to make further economies and improve quality; several studies have already been made in this direction. Measures so far taken include the extensive replacement of the Juba variety by the higher yielding and more easily marketable Poyo, the improvement of road and port facilities, the change in methods of packing from bulk shipments to boxes, the setting up of more collection centres and greater fertiliser and insecticide applications.

It is not easy to establish with any degree of precision the extent to which some of these improvements have been translated into lower f.o.b. costs. Yet, a recent study appears to suggest that the gap that would have to be closed between Somalia and its competitors, in the absence of preferential treatment in the Italian market, is not very large. The position is summarised in the Table below.

Somalia: Competitive position of Somalia bananas in the Italian market (a)

(U. S. $ per metric ton)

Items	*Ecuador*	*Ivory Coast*	*Somalia*
Production	17.60	n.a	42.50
Box	22.00	n.a	28.00
Packinghouse till f.o.b.	39.60	n.a	n.a
F.o.b. price	78.60	105.00	105.00
Sea freight	50.00	55.00	55.00
Wastage etc.	8.00	n.a	7.00
C.i.f. price	136.60	160.00	167.00
E.E.C. duty	27.30	—	—
Italian consumer tax	144.00	144.00	96.00
	307.90	304.00	263.00

Source: F.A.O. Marketing of bananas - Report to the Government of Somalia, 1967.

(a) Data refer to the situation prevailing before the closing of the Suez Canal.

Bananas: Area, Output and Yields, 1960-66

Year	Cultivated area (000's hectares)	Index 1960 = 100	Output (000 tons)	Index 1960 = 100	Yield tons per hectare	Index 1960 = 100
1960	9.1	100	91.6	100	10.0	100
1961	11.0	121	98.0	108	8.9	89
1962	12.1	133	107.0	118	8.8	88
1963	11.0	121	126.0	139	11.4	114
1964	9.8	108	140.0	154	14.3	143
1965	10.7	118	157.0	173	14.7	147
1966	7.5(a)	82	126.8(a)	139	16.9	169

Source: Statistical Abstract, 1966.

(a) Provisional.

Sugarcane: Sugarcane cultivation in Somalia dates back to 1927 when SAIS (1) an Italian company, installed a mill in Johar. The company was later reconstituted as SNAI (2) in which the Somali government has a 50 per cent share. The total area of the SNAI concession is more than 25,000 hectares, of which nearly a third has been brought under irrigation. The area actually planted with sugarcane between the period 1960-65 did not exceed 1,700 hectares. In 1966-67 the area under cane was increased to over 5,000 hectares with milling capacity more than trebling from 12,000 to 40,000 tons of cane. The past years have also seen improvement in yields and sugar content as a result of better cultivation practices, drainage and more intensive fertiliser application. At the moment, plant output is around 30,000 to 35,000 metric tons of sugar which meets a major part of domestic requirements. In view of plans to expand sugar production and set up a second unit if found feasible, efforts are underway to increase cane output by enlarging the cultivated area and introducing better technical inputs.

Output of sugar 1960-61 — 1966-67

Year	Area cultivated (in hect.)	Index 1960-61 = 100	Outp. (a) of cane	Index 1960-61 = 100	Outp. (a) of sugar	Index 1960-61 = 100	Import (in m. Shs.)	Index 1960-61 = 100
1960-61	1,174	100	116.8	100	11.8	100	10.2	100
1961-62	1,390	118	128.8	110	12.5	106	10.6	104
1962-63	1,614	138	117.3	100	11.8	100	18.9	185
1963-64	1,100	94	90.6	78	8.8	75	17.4	171
1964-65	1,662	142	149.7	128	16.1	136	14.8	145
1965-66	3,120	266	258.7	204	24.1	204	4.9	48
1966-67	5,159	439	350.0	300	35.0	297	n.a	n.a

Source: MPC, Statistical Abstract.

(a) In thousand metric tons.

---

(1) Societa Agricola Italo-Somala.

(2) Societa Nazionale per l'Agricoltura l'Industria.

Cotton. Cotton has been a traditional crop in Somalia. During earlier periods, the long staple variety grown in Somalia was considered superior to that of Egypt, but it has deteriorated during recent years due to lack of care. It still remains the predominant variety but has an uncertain quality due to degeneration. It was grown by the Italians on a plantation basis in the inter-rive area on irrigated land. Cultivation has been discontinued owing to high labour costs. The resultant is that cotton ginning and oil pressing installations are underutilised.

Cotton continues to be grown however by Somalis in the irrigated and dry farming areas of the south. There is an internal demand for traditional varieties for the manufacture of handloom cloth popularly known as «Benadir Futa»; the remainder is exported, mainly to Italy.

Somalia: Cotton exports, 1960-66

Year	Exports (metric tons)	Index 1960 = 100
1960	984.3	100.0
1961	571.2	58.0
1962	501.4	51.0
1963	248.0	25.2
1964	484.0	49.2
1965	287.0	29.2
1966	4.3	0.4

Source: M.P.C. Statistical Abstract

Compared to cotton grown in the dry-farming area of the inter-river zone, the crop raised under irrigation in the lower Juba area has had a relatively greater degree of stability because of favourable environmental factors. The qualitative defects of Somali cotton are traceable to inadequate cultivation practices and techniques.

Research points to the following prerequisites for expanding output in the irrigated areas:

mechanising of sowing, cultivating and harvesting;
use of herbicides;
a balanced fertiliser formula;
suitable application of insecticides.

These preconditions can be met without great effort. Large areas of irrigated land are already available for cultivation and can be extended by the further exploitation of the Schebelli and Juba rivers.

About 50,000 to 60,000 hectares mainly in the Upper Juba region are suitable for cotton cultivation by traditional dry farming methods with an estimated average output of 4 to 5 quintals of bolls or the equivalent of 12 to 15 quintals of seed cotton per hectare.

An integrated programme of cotton growing, ginning and pressing will ensure maximum returns. Somaltex is interested in medium staple cotton and will meet the ginning requirement for this variety. Additional plants for ginning and baling conforming to modern marketing requirements and for high standard edible oil processing will have to be installed at a subsequent stage.

Grapefruit: Grapefruit was first introduced into Somalia around 1910 and planted experimentally at the Genale Agricultural Station. Until 1935 the area of the largest plantation did not exceed 8 hectares; even at present it is less than 100 hectares.

The prospects for crop diversification in the irrigated areas has attracted farmers, especially the plantation owners to grapefruit cultivation. The large area of unutilised land available in the banana concessions has been contributory in this respect. The soils along the Schebelli and Juba where, up to the present, Somalia's grapefruit are grown, have proved congenial to its expansion. Indeed, in all cases where sufficient crop care is provided, yields are good.

A study on the potentialities of agricultural diversification has suggested that in 1963-64 there were 37,290 grapfruit trees wholly confined to the inter-river area.

Grapefruit trees by district, 1963-64

DISTRICT	Number of trees		
	Fruit bearing	Young	Total
Johar	4,250	540	4,790
Afgoi	1,000	6,000	7,000
Genale	18,500	5,000	23,000
Juba	1,900	100	2,000

Source: Italconsult, Rome, 1965.

The large proportion of young trees indicates the growers' anticipation of crop profitability.

A trial shipment of grapefruit made as early as 1950 to Italy highlighted a potential market. Total estimated output in 1964 was 10,000 to 12,000 quintals of which 2,000 to 3,000 were exported. There are export potentialities in other European countries as well as in the Middle East. It is claimed that Somali grapfruits possess special qualities which enable them to compete successfully on the international market. It is also possible to process the fruit for domestic consumption and export.

An average annual yield of one quintal per tree has been achieved but this can be doubled by adequate irrigation and fertilizer. Cultivation is beset with certain problems. Fertilizer experimentation especially with minor elements is needed. Insect control and correct fertilizer use will greatly improve fruit appearance. Ground cover control should also be studied.

Groves of one-year old seedlings require 5 to 6 years to fruit. The fruit is marketable during the seventh or eighth year with maximum fruiting attained during the tenth, eleventh and twelfth years. Trees continue to produce profitably up to 30 to 35 year. With greater care their productive life could be prolonged for another 10 years.

Both traditional and plantation sectors are beset with innumerable difficulties. In the former, production is largely for subsistence and is frequently the victim of capricious rainfall and drought.

The goals of agriculture are framed within the overall long-term objectives of economic and social development. Specifically these objectives can be achieved by eliminating existing bottlenecks that impede the pace of growth. An important development strategy relates to farm diversification in both irrigated and rain-fed areas.

Bananas have remained almost the only crop cultivated in the irrigated areas. While the cultivation of bananas must be rationalised to make this crop internationally competitive it is also essential to use uncultivated but irrigable land for other cash crops.

There is a sizeable area of land under concession but presently unutilised which can be used for productive purposes. With a minimum capital outlay this land can become the vantage point for a sustained diversification drive, as it possesses the supplementary advantage of accessibility to basic infrastructure: roads, ports, water supplies and proximity to consumer markets. The problem of colonisation and manpower supply are minimal since this land is located in settled areas.

Similarly, the present tendency to cultivate the dry-farming area with sorghum which is a staple food should pave the way to more diversified output notably cotton. More rational livestock raising must be introduced; this would contribute not only to raise rural incomes, but indirectly facilitate the sedentarisation of nomads.

With a view to promoting the expansion and diversification of agricultural production, an Agricultural Development Agency (ADA) was established in February, 1966. Its immediate objectives are the expansion of credit to farmers and promotion of agricultural cooperatives. Government is also in the course of implementing, with technical and financial assistance from the United Nations Special Fund, a grain marketing, storage, and price stabilising project. The need is urgent for price stablization policies since, given the size of the country, poor transport and uneven rainfall, food grain prices tend to fluctuate substantially.

While it is urgent to diversify agriculture it is also fundamental as part of the development strategy, that the country should become self-sufficient in food so as to meet rising demand as employment and incomes rise in the non-farm sectors. As a greater pace of development is attained in other sectors, the farm sector will be required to meet the need for food and industrial raw materials on an increasing scale.

Sustained growth of the agricultural sector is called for to avoid sectoral and income imbalances. The perils of excessive urban growth and the resultant socio-economic problems of continuous migration from the rural areas will have to be mitigated through a reasonably balanced development between urban and rural areas. Imbalances can be minimised by developmental activities in the agricultural sector which will augment employment and incomes.

With vast areas of land still unoccupied, and with farm technicues still archaic, the marginal increase in output is likely to be large. Consequently if basic infrastructural investments like irriga tion facilities; roads, fertilisers, pest control, selected seeds, improved agricultural implements and cooperatives for marketing are forthcoming, there is likely to be substantial returns on investment.

Within the framework of a long-term development strategy the objectives of the Short Term Development Programme are:

Increase in food production with a view to self-sufficiency.

Diversification of farm output and introduction of new cash crops such as cotton, oil-seeds and citrus fruits, as well as food crops such as rice.

Rationalising the cost-structure of banana cultivation to make it competitive in the international market.

Generating larger employment opportunities in rural communities.

Proper utilisation and conservation of rural resources i.e., soil, forests and wild life.

Improving agricultural infrastructure, especially marketing in order to ensure maximum returns to farmers.

The Programme will also take advantage of the research on rice and tobacco growing being carried out in the experimental farm in Johar by experts provided by the Peoples' Republic of China.

b) Forestry.

Forests, a renewable resource, yields not merely forest products but is a source of soil and wild life protection. Its protective role has frequently been given an honoured place in forest management. This point, however, has been unduly over-stressed since a scientifically managed forest also retains its protective cover. In a wholly protective forest, grazing and agriculture, by definition, are impossible, and purely formal legislation will not exclusively suffice for its protection. (1) With the shift to sedentarised cultivation, systematic destruction of the forest cover will cease. With the planting of adequate forage, burning will be curtailed and protection facilitated. In this respect, forestry, agriculture and livestock are inextricably interlocked. Thus, the depletion of forest capital, which has been characteristic not only of Somalia but over most of the African region, is inter-related with other aspects of development.

---

(1) «In the past, there have been too many instances of forest laws enacted whose provisions have proved inapplicable in practice because of lack of means of enforcement and/or want of popular acceptance. There have been concessions granted, containing admirable provisions for silvicultural measures to accompany exploitation, which provisions have been ignored in practice for lack of professional control». F.A.O., **The State of Food and Agriculture**, 1962, Rome, p. 123.

Although our nation possesses natural forests, a comprehensive forest inventory is yet to be made to determine their content and rate of growth. The extent to which forests are being depleted and degraded by shifting cultivation, burning, grazing and indiscriminate cutting will be the object of such an inventory. The Programme will lay the cornerstone for later work in the field of forest and wild life and on the expansion of artificial forests.

The need for forestry skills as well as research into the techniques of nursery work, harvesting of selected seeds, soil preparation, planting, thinning, and determination of the felling age for each of the major species will be the concern of forest policy.

Further, extensive and continuous research effort must be pursued to adapt existing technology to the requirements of our forests. Amongst other things research will have to be centred on extending the range of species used for sawn wood, and ultimately plywood and veneer; work and training required for small scale plants producing wood products; research into work methods to improve productivity in harvesting; inquires into species and cultivation methods so that plantations may be set up in areas which are poorly endowed with natural forests, notably in the arid and savanna areas; inquiries into the most appropriate species for lowcost wood in the coastal regions and exploration of the possibility of setting up import-substituting industries; inquiries into the cost and managerial techniques necessary to raise the productivity of natural forests; inquiries into methods to improve the out-turn of wood, with specific attention to the ecological equilibrium.

During the Programme, attention will be centered on the protection and better management of forest reserves. The denuding of existing forest reserves can be diminished appreciably by rigorously enforcing the ban on charcoal exports. The project for sand dune reafforestation is designed to come to grips with the inter-locking dependency of agriculture and forestry. At present, domestic demand is met almost exclusively by imports; the financial gains derivable from import substitution are considerable.

c) Fisheries.

Somalia is endowed with a longer coastline than any other African country, extending over 3000 km along the Gulf of Aden and the Indian ocean. Yet the fishery resources and other offshore wealth that it contains has hitherto neither been scientifically established nor systematically explored.

Fisheries and its ancillary trades can become crucial sectoral poles of growth in terms of output and employment if vigorous measures are pursued. If these are not forthcoming, it may be anticipated that, given the demand elasticity for fish products, they will continue to be exploited by the more rationally endowed large scale producers.

Various attempts have been made since independence to promote fisheries. A boatyard producing ocean going craft has now been completed. The traditional sector has been assisted financially by the Development Loan Section of Credito Somalo. Yet our fishing fleet consists of boats which are suitable only for offshore fishing and which are non-operational in inclement weather. Up to the present net fishing is not widely practiced. Although there are a few cooperatives in Mogadiscio, Beila, Eil and Bosaso, the movement has not yet struck deep roots.

Processed fish is exported almost exclusively to Italy, while dried, smoked and salted varieties are shipped to neighbouring countries.

Volume (in tons) and value (in 0000 Sh.) of fish exports

Year	Fresh, salted, dried or smoked fish		Processed fish		Total	
	Volume	Value	Volume	Value	Volume	Value
1961	1,055	854	492	2,628	1,547	3,482
1962	898	729	1,746	5,401	2,644	6,130
1963	488	496	814	4,375	1,302	4,871
1964	415	423	883	2,984	1,298	3,407
1965	693	576	709	970	1,402	1,546
1966	n.a.	n.a.	n.a.	n.a.	872	2,951

Source: Customs statistics.

There are four fish processing plants located along the northern coast of Somalia, of which one is still under construction.

The following table gives the details of the four installations:

Data on fish processing plants

Location	Annual capacity (in tons)	Persons employed
Alula	10,000	77
Candala	18,000	312
Habo	18,000	312
Las Koreh (a)	2,200	250 (b)

Source: MPC.

The current Programme stresses the more rational and productive expansion of fishery resources by systematizing and extending fishery surveys; greater rationalization of fishing techniques, training programmes; and construction of port facilities.

The immeasurable potentialities that can be opened up by oceanographic reseach have not been ignored. The government lays great emphasis on sub-regional African cooperation. One such cooperative venture is oceanographic research which, because of its considerable costs and the technical expertise required, lends itself ideally to the cooperative efforts of the various coastal countries of the East African sub-region.

The build-up of a modern trawler fleet should only be concieved upon completion of comprehensive surveys and will be partnered by training programmes. A comprehensive strategy cannot, of course, be fully implemented in the current Programme period. Such a strategy necessitates the setting up of modern port and berthing facilities, extensive maintenance workshops, freezing, handling facilities and a distribution network.

(a) Still under construction.

(b) Anticipated labour force.

B. The Projects

a) Agriculture.

Research, extension and training — The USAID/Wyoming Team Agricultural Project, in cooperation with the Ministry of Agriculture, has functioned since 1965. Construction of the Bonka Farmers Training Centre is almost complete. The Central Agricultural Research Station and the accompanying Agriculture Centre at Afgoi are to be completed in 1969. Activities at Bonka include farmer training, tractor and demonstration farming for sorghum, peanut and legume cultivation. In-service training courses are being conducted for personnel of the Ministry of Agriculture.

The Central Agricultural Research Station at Afgoi is currently engaged in introducing and testing a large number of crops; work is also underway on improving existing strains. Research is being carried out to improve farm practices for all crops. Construction and equipment of the research farm is nearly complete, and future expenditure will largely be earmarked for operational and training purposes. The new centre will embrace laboratories, offices, training facilities and staff housing. Experiments already made include successful production of sweet potatoes, rice, oilseeds, sorghum, maize, peanuts, mung beans, cowpeas, onions and several vegetable crops. Research has opened up the possibility of raising banana productivity with proper plant spacing. A large citrus orchard will furnish improved varieties for new commercial plantings. The task of the Short Term Development Programme is to train qualified agricultural extension workers, provide high grade seedlings and teach better techniques of cultivation.

Local research and extension programme have, in many countries, proved to be the most effective methods of increasing agricultural output. Additional time beyond the period of the current Programme will be required to train local staff to carry out effective agricultural research and extension work. Future emphasis will be placed on development of strains and cultural practices for rice, citrus fruit, bananas, vegetables and cotton suitable for cultivation in the irrigated areas. Similar work will be continued on maize, sorghum, sunflower, peanuts, mung beans, cowpeas and forage for cultivation under dry farming conditions.

Sand-dunes reafforestation — There are about 78,000 hectares of different kinds of dunal lands in the inter-river area. While they are an important grazing area during the spring rains, there is the constant threat of their migration towards the hinterland and encroaching on cultivable areas. Arid regions have attracted attention to both their perils and potentialities. Rational use of arid regions through dry and irrigated farming as well as stock breeding, have been experimented with in various parts of the world. A significant corpus of knowledge and techniques are currently available to repel encroachments as well as harness dunal areas. A project for the reclamation of sand dunes is therefore included on an experimental basis in the Short Term Development Programme. *Conocarpus Lancifolius* (damas), a local species suitable for dhow construction, can grow in any coastal area with a high water table even if it is brackish. Likewise *Casurina Equistifols* and *Eucalyptus* can also be grown in the arid regions.

Land selected for afforestation will be enclosed and declared a prohibited area for grazing. Once surveyed and mapped the area will be planted with specifically selected trees. Local grass is capable of permanently binding the soil and can be used in control work. Equipment necessary is available from the Ministry of Agriculture. The project envisages the digging of wells and other auxiliary construction.

The sand-dune reclamation project will be located between Merca and Shalambot. If successful, it will be extended to an area between Shalambot and Afgoi. Choice of this area is important since the movement of sand-dunes is threatening coastal villages, roads and agricultural land. Past attempts at control suggest that reclamation is possible if propitious correctives are applied. The area's fairly well distributed rainfall, high humidity and moderate winds are initial advantages.

The feasibility of growing crops like cashew and coconut palms along the coastal area will also be explored. These two crops are economically more productive than timber trees. Wherever possible, priority will be accorded to them.

Seed reproduction - As part of the agricultural diversification programme, two seed reproduction stations will be established: the first in Genale, with 300 hectares; the second, in Camsuma with 100 hectares. The project is to provide farmers, who use irrigated land on the Schebelli and the Juba, with grapefruit seedlings and seeds for short and long staple cotton and sesame. Targets set for the various crops are as follows:

The grapefruit seedling to be distributed will be sufficient to raise the area under crop to 1,500 hectares, as well as meet requirements for replanting. It is presumed that nearly 25 per cent of the existing area of nearly 200 hectares will require replanting over the next three years.

Cotton seed reproduced in the Genale station will be used to cultivate 5,000 hectares with medium staple cotton representing about a third of the total area needed to meet the demand of the Somaltex cotton textile factory. About 2,500 hectares are to be planted with long staple cotton in the Lower Juba which will produce 500 tons of lint for export and 1,000 tons of seed for edible oil. The main seed reproducing station will be in Genale with a sub-station at Camsuma.

The European Economic Community will provide funds for setting up the stations and operating costs for a period of four years. It is expected that thereafter both stations will be self-financing.

State farms were an important institutional device of the first Five Year Plan for increasing farm output.

The physical targets for these projects were:

Food grain farm — 6,250 hectares
Location — Tug-Wajaleh
Crops — Wheat, sorghum, legumes, maize, 3,250 tons a year
— forage 5,000 tons a year
Phasing of cultivation — 1963 500 to 1,000 hectares
— 1964 2,000 hectares
— 1965 5,900 hectares
Year of full production — 1965
Estimated cost — Sh. 20,000,000

Cotton farm — 5,000 hectares
Location — Lower Juba area (Gelib)
Production — 10,000 tons of seed cotton
— 12,000 tons of food grains
Year of full production — 1969
Estimated cost — Sh. 30,000,000

Oil seed farm — 5,000 hectares
Location — Lower Juba area (Gelib)
Production — 8,000 to 10,000 tons of oil-seeds, sesame, groundnuts and castor. 10,000 tons of food grains, maize, legumes, rice.
Estimated cost — Sh. 30,000,000.

It was the intention at the formulation stage of the projects that both the cotton and the oil seed farms would be irrigated by the construction of a barrage on the Juba near Fanole and a 35 km long irrigation canal. Work on the three farms started in 1963 but was interrupted in January 1966 due to non-availability of local funds and difficulties of management.

In the Tug-Wajaleh food grain farm, 2,240 hectares were cultivated in 1964 and a satisfactory harvest was obtained. However, owing to the shortage of investible funds only 900 hectares were cultivated in 1965. During the 1967 Der seasons, 500 hectares were cultivated and 2,100 quintals of wheat and 2,000 quintals of sorghum were harvested.

At the time of work stoppage on the oil seed farm, 2,300 hectares had been cleared for cultivation and construction of irrigation canals planned.

Up to 1966, 1,890 hectares of land were cleared in the cotton farm site and 150 hectares of land were prepared for irrigation. No planting has yet been undertaken on the farm.

The following areas are expected to be cultivated during the current Programme:

1,000 hectares at Tug-Wajaleh
350 hectares at Gelib

The objective of the Tug-Wajaleh cultivation is to reproduce wheat seeds, to raise wheat production and demonstrate the feasibility of nomadic settlement in the Tug-Wajaleh plain area.

Among the aims of the Gelib state farms are the investigation of optimum crop rotation on irrigated lands, reproduction of rice, cotton and oil seeds; demonstration on a larger scale of the results of limited research work on plant varieties; improved practices of cultivation and fertilizer application; demonstration of the feasibility for rural settlement and raising food output.

The essential precondition for cultivation of the Gelib area still remains the priority construction of the irrigation system based on the Fanole headworks capable of irrigating 24,000 hectares.

In addition to farm activities, three buildings for the storage of machinery will be put up at Gelib.

Capital expenditure on this project contains an element of working capital for cultivation which will be reimbursed through the sales of crops. Recurrent expenditure will be financed out of farming profits.

The annual output of the state farms is estimated as follows:

Tug-Wajaleh	4,800	quintals of wheat
	4,000	» » sorghum
Gelib	6,000	» » cotton
	1,600	» » groundnuts and sesame
	800	» » rice.

In the long-run, the state farm areas must be converted into settlement areas for individual cultivators, who should be authorized to cultivate land on an individual or cooperative basis.

Banana — Part of the difference in production costs of Somali bananas and those cultivated in other countries reflect different degrees of comparative advantage; it is also likely that a part of the difference represents higher profits or less efficient organisation. Subsequent to the introduction of larger, faster and better equipped ships, the unit freight cost of shipping round the Cape reportedly compares favourably with the cost of shipping through the canal. If these ships continue to be used after the reopening of the canal, prospects of reducing the unit freight cost would be bright. Moreover, a scheme has been blueprinted for the domestic manufacture of packing boxes which would further curtail costs.

Farm gate cost of Somali bananas is competitive but climb sharply from that point onwards. These are beyond the control of individual farmers and consequently interventionist measures are mandatory. Transport costs from packing centres to ports, embarkation fees, export taxes, handling charges and most important of all, company charges will be scrutinised in detail so that further economies can be enforced.

Although a segment of the banana growers, notably the expatriate sector, uses modern technical inputs, there is much scope for improvement which can be disseminated by extension services. The Agricultural Research Centre at Afgoi has been researching on bananas but still greater efforts must be deployed. Banana research problems could best be studied by specialised experimental farms. The financing of such enterprises could be by special levies on the industry itself.

There is a strong presumption for farm consolidation to optimise the economies of scale. Consolidation would require, as a normal concomitant, an appreciable modification of existing concessionary patterns.

The f.o.b. sales system is extremely rigorous and is likely to exclude large quantities of banana output from export markets. Since rejects cannot be wholly absorbed by the domestic market, plans will be laid during the Programme period for banana processing as already pinpointed by feasibility studies.

Eventually, promotion and export of the product will be transferred to a Nationl Banana Agency. Meanwhile, an Interministerial Committee on bananas will continue to scrutinise and approve all export contracts and be responsible for planning the improvement of the industry, providing assistance in the opening up of new markets and studying investment requirements necessary to enhance the industry's competitiveness. Although marketing is presently in the private sector, draft legislation for the setting up of a Banana Marketing Board is under study.

Cotton production – The Agricultural Development Agency has entered into a contract with Somaltex to provide annually approximately 1,500 tons of medium staple cotton. This quantity can be produced on 15,000 hectares and is considered a feasible target since past experience proves that, with firm demand, farmers will respond to the stimuli of market forces.

While the land will be cultivated by individual farmers or cooperatives, there is need to provide credit before cultivation is assured. It is also necessary to extend to farmers technical guidance as well as pesticide services to make cultivation productive. The short-term credit will be mainly used for the purchase of seed, insecticides, fertilisers and to employ labour required for harvesting.

Forty tons of medium staple Carolina Queen seed from Syria were imported during 1967, and are expected to be multiplied by selected cooperatives and farmers on nearly 1,300 hectares of land. They will produce a minimum of 260 tons of seed which will be sufficient to plant 8,600 hectares. As the Syrian seed will be already second generation, it is not likely to produce beyond a third crop without degeneration. At least 70 tons of new seed will therefore be imported every second year to produce 450 tons of seed required to meet the full demand for cultivating 15,000 hectares.

Full capacity working is to be achieved over three years. During 1968, 1,300 hectares will be cultivated followed by a further 6,000 and 7,700 hectares in the two subsequent years respectively.

The scope for import substitution is immense, since it would involve a saving of around Sh. 15 million a year. Cotton seed oil can replace vegetable oil imports with even a comfortable export surplus. Also, oil-cake which is a by-product could be a vital source of animal feed.

Credit requirements for cultivating one hectare has been estimated as follows:

Seed — 30 Kg	40 cent/Kg	Sh	12.00
Fertilizers 50 Kg.		»	75.00
Insecticides	4 sprayings	»	100.00
Harvest labour	15 cent/Kg	»	45.00
	Total	Sh.	232.00

On this estimate, credit to be disbursed during the Programme will be:

	Hectares	*Sh.*
1968	1,300	301,600
1969	6,000	1,392,000
1970	7,700	1,786,400

The bulk of credit will be recovered at the time of marketing. However, it will be necessary to subsidise the cotton seed in the first instance to the extent of Sh. 1.60 per kilo by selling the imported and improved seed at 40 cents per kilo. At peak levels of cultivation, credit extended will attain a maximum of Sh. 1.8 million. In addition, Sh 720,000 will be the total subsidy on seed used on 15,000 hectares.

The crop produced under this project is expected to earn an income of Sh. 360 per hectare assuming a yield of 3 quintals per hectare. As cultivation costs (excluding labour supplied by the farmers themselves) will be Sh. 232 per hectare, the farmer will receive a net income per hectare of Sh. 128 including Sh. 48 as subsidy, during the first year. This will increase to Sh. 140 in the next year and will remain at that level till the time when new seed has to be purchased.

Credit to cooperatives — Credit institutions which meet the requirements of small cultivators and cooperatives, especially in the dry-farming areas, hardly exist. It is to be noted that the preconditions for successful working of such credit institutions are almost non-existent. Absence of definite individual title to land inhibits credit worthiness. Likewise the absence of laws governing cooperative societies makes it difficult to stabilise the cooperative organisation. These institutional defects will be subjected to review in the Programme period. The complexity of these problems must not be ignored or underestimated.

There are nearly 50 cooperative societies in the country, including those organized as «religious groups». Most of them were established after the catastrophic drought of 1965.

An estimated total of Sh. 3 million has been invested in these cooperatives. However, they have reached a critical stage in their existence due to financial stringency. The immediate requirements for the cooperative societies are technical and administrative advice as well as financial help in the form of medium and long-term credit. A modest credit programme sponsored by the Agricultural Development Agency covering an area of about 1,000 hectares per year will be launched over the period of the Programme.

The estimated average credit requirement for cultivation of one hectare (inclusive of a 5 per cent charge by the Agricultural Development Agency) is as follows:

Ploughing	Sh.	30.00
Harrowing	»	80.00
Planting	»	50.00
Bunding and soil conservation	»	50.00
		210.00
5 per cent service charge		10.50
	Total	220.50

Other cultivation costs will be met by the cooperatives. On the basis of 1,000 hectares to be cultivated annually, total annual credit requirement will be Sh. 220,500. The crop pattern that will emerge cannot be forecast at this stage, but it is presumed that financial returns will be satisfactory. The organisational nucleus of this project will be provided by the Agricultural Development Agency.

UN Special Fund Grain Marketing and Storage. The project is sponsored by the Special Fund of the United Nations. In addition to warehousing, the project is expected to ensure price stabilisation through purchase and storage. It is to be phased in two stages. Phase one of approximately a year's duration consists of a survey of present grain marketing and a programme to regulate supplies and ensure stable prices. Phase two lasting approximately four years, follows immediately except that certain aspects of the first phase may be carried over into the second. During the latter phase, a price stabilisation and marketing programme for sorghum and maize is to be implemented in such areas as indicated by the earlier survey. Additional storage is to be installed during the second phase. In both phases, training in agricultural marketing, survey work and price administration will be given to counter-part personnel and other Somali staff, so that the project will be permanently operational. Officially launched in 1966, phase one is still ontinuing and phase two will be initiated during the Programme period. The project is programmed to start in the Baidoa and Bur-Hacaba districts in the dry-farming zone.

Grain marketed in Baidoa region varies between 30,000 and 0,000 tons annually. The purchase organisation is expected to procure a minimum of 25 to 33 per cent of grain to effect price stabilisation.

A storage capacity of 9,600 tons is planned: 7,200 in Baidoa and the rest in Afgoi and Giamama, utilising the existing facilities. A staff of 12 is required at the two main storage depots, and an additional 11 at each of three rural purchasing centres. A two month training programme is forecast for the second phase.

The financial requirements for one year's operation of the project are as follow:

Grain Marketing, Storage and Price Stabilization
Total financial requirements for one year's operation

	(Sh. 000)
Cost of grain	2,450.0
Staff (additional to counterpart staff)	207.5
Transport costs	1.750.0
Equipment and materials	232.5
Total	4,640.0

The above sum is recoverable from grain sales. The project will be managed by the United Nations Special Fund up to 1971 when it will be transferred to the Government.

Import of machinery and equipment required will be exempt from duty, which implies that government is subsidising the project by the following additional amounts:

Year	Amount of duty foregone (in Sh. 000)
1968	110
1969	45
1970	11
Total	166

A revolving capital of a maximum of Sh. 5 million will be necessary during the Programme period for grain purchase operations

b) Forestry.

Al-Madow saw mill — The envisaged modernisation of the Al-Madow saw mill for the Al-Madow forest area will continue to meet a part of domestic demand. Its present daily out-put is about 600 cubic feet of processed timber. Gross income from the operation will be around Sh. one million yearly based on the assumption of 250 working days. Gross income is expected to rise substantially with additional investment.

Preservation of Wild Life — Population increase, growth of livestock, the progressive diffusion of firearms, extension of cultivated areas and improvement in communications are some of the salient factors which imperil existing wild life. Unless prompt and effective action is taken, there is the danger that this great capital asset will be irreparably depleted. In this respect the granting of export licences for franco-valuta exports of wild life items such as ivory, skins of wild animals, rhino horns, etc., will be the subject of closer scrutiny.

With these aims in view, an efficient game service will be set up to supervise implementation of the Game Laws. These laws will be enforced in the most important areas where hunting is already prohibited or restricted. In time, the game force will be extended. Development of these services will contribute not merely directly to the preservation and further growth of wild life but will also serve to promote tourism. Indeed, the growth of tourism, particularly in the natural forests, and reserves, will be largely conditioned by the strength of these services.

With effective control a survey of wild life resources will be made by a wild life biologist and a field technician. The survey will include data collection on fauna and their habitats and the planning of appropriate boundaries for natural parks.

Fisheries.

U.N. Special Fund Fisheries Survey. The two year plan of operations for a Fishery Survey proposed by the FAO is related to the U.N. Gulf of Aden fisheries survey now under way. The objective of the FAO project is to survey the fishery resources of Somalia. Fisheries, biological and environmental survey will be carried out on the north and north eastern coasts of the country. Where possible, results of the Gulf of Aden project will be examined and adapted to the present project. These studies are merely preparatory to the further advance of fisheries. Special provisions will also be made for the successful utilization of the already available capacity of the fish processing plants; counterpart staff will be trained on the spot during the operational period.

A survey for the supply of raw materials is presently under way for the Las Koreh plant, and negotiations have also started for two additional surveys for the Makhar and Benadir coast.

Agriculture and related activities - Project Costs and sources of finance

(Sh. 000)

PROJECT	DOMESTIC			FOREIGN			Total Project Cost
	Ordinary Budget	Additional Budgetary Provision	Other	Grant	Loan	Unspecified	
Agriculture	**2,654**	**8,591**	**17,862**	**14,872**	**2,588**	**365**	**46,932**
Research, extension and training	—	2,150	—	5,290	—	—	7,440
Sand dune reafforestation	162	39	—	—	—	365	566
Seed reproduction	—	—	—	3,300	—	—	3,300
State farms	—	3,882	—	—	2,588	—	6,470
Bananas	—	2,520	16,636	—	—	—	19,156
Cotton production	—	—	1,106	—	—	—	1,106
Credit to cooperatives	—	—	120	—	—	—	120
U. N. Special Fund grain marketing	2,492	—	—	6,282	—	—	8,774
Forestry	**990**	**1,147**	**—**	**—**	**—**	**—**	**2,173**
Al-madow saw mill	270	475	—	—	—	—	745
Preservation of wild life	720	672	—	—	—	—	1,392
Fisheries	**808**	—	—	**4,119**	—	—	**4,927**
U. N. Special Fund survey	808	—	—	4,119	—	—	4,927
Total	**4,452**	**9,738**	**17,862**	**18,991**	**2,588**	**365**	**53,996**

Chapter 7.

ANIMAL HUSBANDRY

A. The Setting and Strategy of Development

Livestock is our most important single renewable resource and is owned and exploited exclusively by Somalis. Somalia possesses one of the highest livestock-man ratios in the world. The objective of animal husbandry policies is directed at the preservation and development of this precious resource. About 60 per cent of the population is entirely dependent on it for their livelihood; another 20 per cent supplement their income from this resource, notably in the inter-river area; almost half of aggregate exports are derived from livestock. No precise data for total livestock population are available although varying estimates have been made. An FAO study (1) gives the following estimate:

Type of animal	*in millions*
Cattle	1.4
Camels	2.0
Sheep	2.3
Goats	4.7
Total	10.4

Accurate cattle statistics are difficult to establish due to extensive migratory movements within the country as well as movements across the border into Ethiopia and Kenya. To a lesser extent such movements are also characteristic of sheep and goats. Annual variation in the number of animals is contingent on weather conditions particularly drought. An indication of a total is, therefore, likely to be meaningful only for the year of estimate. The geographical distribution of animals is linked with the availability of forage and water. Open pastures are suitable for cattle and sheep whereas areas covered by trees, shrubs and bushes are more congenial to camels and goats.

---

(1) FAO, **Livestock Development Survey 1967.**

More than two thirds of total cattle are in the south: Benadir, Upper and Lower Juba. Camels are evenly distributed in the north and south while 80 per cent of sheep and 20 per cent of goats are in the north.

Nomadic food consumption patterns have evolved in response to the need to maximise the use of livestock resources without undue depletion of herd. Emphasis is thus laid on consumption of milk and by-products rather than on meat. Herdsmen normally market their unproductive stock: males over and above those required for reproduction; old males and females; and females that are sterile and unproductive. Although meat is not an important part of the daily diet, large numbers are slaughtered on ritualistic occasions. Meat consumption also tends to increase when milk output falls seasonally below the minimum requirements of the pastoralist.

In addition to subsistence, livestock ownership mirrors potent prestige considerations attached by traditional society to pastoralism as a superior way of life. Animal herds, especially camels, are a status symbol. The roots of this are traceable to the understandably intense concern of the pastoralist for economic security.

Dearth of water is a major determinant of the herder's mode of existence and his propensity for herding as an occupation as well as surplus accumulation of stock. For a part of the year nomads, particularly in the inter-river area, become settled cultivators suggesting that with adequate water they could be transformed into permanent farmers. Experience indicates that agriculture offers far less security than stock raising in a region plagued by indeterminate water supplies. The herder, in contrast, has the advantage of mobility. In times of drought, however, his condition becomes critical with his animals being invariably milkless or at worst stricken by famine. To feed himself and his animals he is compelled to trek to distant water points which often imperils the animals' existence. Droughts trail in their wake diseases on an epidemic scale. The combined effect of these calamities is that the herd is depleted. Hence, to reach his destination with a sufficient stock he must maintain a surplus in excess of his subsistence requirements. This economic margin is perhaps the paramount determinant of the size of the herd. There is only a limited domestic demand by other sectors for the output of the pastoral economy. Notwithstanding their relatively larger purchasing power, the plantation and urban population do not exert a sufficient market pull. This tends to reinforce over-acculation of livestock herds. Since 1960, however, there has been a spurt in the external demand for livestock, mainly due to rising meat consumption in the Arab countries, which has speeded up the tempo of commercialisation.

There is lack of rational grazing techniques due to capricious weather and pasture conditions. In semi-arid climates it is essential that land should be allowed to rest. Movement of animals before the vegetation has attained its full growth drastically curtails the grazing potential. During the dry period, pastures are grazed at permanent watering points. Concentration of animals around these points which are limited in number, destroys all forms of vegetation by grazing and by mechanical action of the hooves. Such non rational pasture-use inhibits a uniform feeding rate throughout the year. Any recurring series of drought years and dry spells beyond normal levels worsens these conditions.

There are four main cattle breeds in Somalia: Boran, Jiddu, Gharre and Abgal. Average daily milk output of a cow during the six months of lactation is about 3 kilos. Among the animals the Jiddu is considered to be a good milker, with more than average yields, whereas the Boran is superior in terms of its rate of growth and meat.

Camels raised in various parts of Somalia have different characteristics which mainly relate to their size, weight and grazing habitat. Dormediaries in the south are larger than those in the north. They are the most desired form of wealth for the pastoralist of the arid and semi-arid areas. Camels are the safest animals to own in periods of drought. They range widely, are not dependent on frequent watering, often use water too saline for other stock and browse the top feed unused by other animals. In the north, however, it is likely that while the traditional nomads are retaining their herds of camels intact, some of the more market-oriented pastoralists have been raising more sheep because of quicker returns.

There are three important breeds of goats: Deg-hier, Deg-uen and Araba. The first is usually found in the driest regions of north and middle Somalia while the others are raised in the south. Accurate statistics on milk output of goats are un-available but it is known that these animals are poor milkers with an average daily yield of approximately 0.3 litres. Reasons for such low yields are not known precisely although diseases such as entero-toraemia, internal and external parasites are major contributory causes.

The black-head sheep is native to Somalia. In the north it is the most important resource of the traditional economy and is readily marketable, with animals mainly exported to Saudi Arabia and Aden. Sheep are raised mainly for meat, the butchered-out weight being around 54 per cent of the live weight.

Next to bananas, livestock represents the most important single export item. With uncertain prospects for Somali bananas in world markets, and with increasing demand for meat and meat products, livestock and their by-products are expected to play a greater role in strengthening the export trade of the country.

Livestock: Output and Marketing, 1964

(in 000's)

Type of animal	Output (a)	Number marketed					Stocking (+) or (−) destocking (e)	Unrecorded (d) Exports
		Slaughtered (b)			Export (c)	Total		
		Abattoirs	Outside	Total				
Camels	170	58	22	80	58	138	+32	40
Cattle	50	29		29	19	48	+2	
Sheep and goats	2,000	145	996	1,141	1,015	2,156	−156	75

Source: F.A.O. *Livestock Development Survey,* 1966

Italconsult, *Diversification of Agriculture,* Rome 1965

(a) Estimate for 1964.
(b) For domestic consumption — estimate for 1963 [illegible] for the south.
(c) Estimate for 1964.
(d) In 1963, an estimated 10,000 head of cattle were exported to Kenya.
(e) Difference between total output and total marketed. They do not include [illegible] livestock in the [illegible]

Export of live animals

(1954 - 1965)

(in 000's)

Year	Cattle	Camels	Goats	Sheep
1954	8.7	0.7	70.0	236.0
1955	8.8	1.7	86.0	234.0
1956	9.3	1.3	94.0	133.0
1957	7.4	2.3	112.5	270.0
1958	11.7	2.5	148.0	276.0
1959	9.6	5.5	146.0	369.0
1960	12.4	6.3	148.5	426.0
1961	24.9	7.7	180.5	447.2
1962	31.5	10.4	221.5	525.9
1963	49.4	16.6	189.7	670.5
1964	56.6	17.7	192.0	823.5
1965	38.1	24.1	375.5	416.1

Source: Foreign Trade Statistics.

Major livestock markets are Saudi Arabia, Aden and UAR with Saudi Arabia being the single most important market.

It is significant to note that whereas the internal price of animals has remained reasonably stable, export prices have shown an uptrend.

Average Price of Livestock

(1956 - 1965)

(in shilllings)

Year	Local Price (Wardiglei market)				Export Price (fob)			
	Cattle	Camels	Sheep	Goat	Cattle	Camels	Sheep	Goat
1956	89	184	23	19	164	222	48	31
1957	104	181	27	22	176	173	53	37
1958	118	188	32	23	233	244	62	46
1959	103	172	24	20	285	289	62	46
1960	109	186	32	26	239	337	65	55
1961	128	255	38	27	236	392	71	60
1962	134	198	36	27	246	417	77	63
1963	129	277	31	27	315	564	83	55
1964	135	277	33	29	348	549	84	50
1965	88	256	30	26	380	560	79	53

Source: Somalia *Statistical Abstract,* 1966.

In recent years the increase in export earnings has been the result of larger animal exports and favourable price-trends. It is not certain, however, whether these uptrends can be sustained without meeting consumer resistence at some point, unless quality is improved.

One of the major diseases that adversely affects livestock is rinderpest. Another is trypanosomiasis transmitted by the tsetse fly which is found in a ten mile broad band along the Shebelli and the Juba. Consequently vast areas of potentially good pasture land are inaccessible. Stock owners using the fringe area of the tsetse belt are compelled to use drugs which reduce their income from animal sales.

In addition to rinderpest and trypanosomiasis, animals are afflicted by ecto-and endo-parasites. Although little is known of the incidence of tick borne diseases, piro-plasmosis is widespread in the south and certain occurances have been observed in the north. In addition to being disease vectors, ticks have a debilitating effect on livestock.

Livestock development should be viewed in the following perspective: need for creating infrastructure necessary for the rational development of production; specific programmes of disease control for the improvement of the quality and number of animals; and the creation of an efficient internal and external marketing system.

Marketing includes the organisation of animal exports which has hitherto been largely ignored. Animals are generally delivered f.o.b. to shippers at various ports. (1) This has led to a sharp down grading of animals. Mortality rates among the animals on ships is high. Insanitary conditions, lack of proper fodder, water and ventilation frequently induce loss of animal weight and death. While the Somali trader is not affected directly by these conditions, they do have a long term adverse effect on livestock exports to Somalia's traditional markets.

It is evident from a scrutiny of the freight charges and price structure in the importing countries that there are large gains in livestock trade. In the future, government will perforce have to enter the foreign trade in livestock by arranging for specially equipped ships. While these problems are not capable of immediate solution, a feasibility study into the chartering or purchasing of ships for the carriage of animals is under way.

In 1966 an autonomous Livestock Development Agency was created with a mandate for:

- financially supporting and organisationally assisting programmes emanating from the Animal Health and Production Department aimed at effective control and eradication of livestock diseases;

---

(1) Some exports to Aden are on c.i.f. basis.

- organisational assistance and execution of projects for production and sale of vaccine and drugs and setting up facilities for diagnostic and clinical work;
- establishing watering points, stock routes, holding grounds stock yards and quarantine stations;
- improving and extending domestic marketing facilities and ensuring reasonable prices to the producer;
- rationalising output, processing and exporting raw hides, skins and leather;
- cooperating and assisting in various training programmes required for disease control and marketing.

B. The Projects

Strengthening of veterinary services — Strengthening of veterinary services for effective disease control is basic to livestock development.

Organisationally, the country is divided into eight regions and 49 districts. It is proposed to equip the regional and district centres with minimum requirements for effective disease control work and initially to employ eight expatriate veterinarians to operate the regional centres. This will enable diagnostic work to be undertaken at the regional level so that quick and effective action can be taken in the event of outbreak of diseases.

District centres will be organised for inoculation and animal vaccination and the existing staff will be strengthened by field training programmes.

Rinderpest and CBPP Control (1) — In addition to consolidating the veterinary services, it is proposed to pay close attention to the control of special epizotic diseases specifically rinderpest and bovine penumonia. A campign for the eradication and control of rinderpest on a regional basis covering the East African sub-region is being organised by the Scientific, Technical and Research Commission of the Organisation for African Unity. Moreover, the regional programme will be underpinned at the local level and will continue after the regional programme is wound up.

It is essential that a special rinderpest unit be organised by the veterinary services. With this aim in view a project is included in the Programme. In addition to 55 staff members assigned to the regional rinderpest campaign, a staff of 48 will be organised into a special control unit for rinderpest, C.B.P.P. and other epizotic diseases. Since this project involves a re-allocation of the existing labour force, no supplementary budgetary charges are needed. The project will, however, require the services of three more expatriate veterinarians, together with equipment and vehicles.

---

(1) Contagious bovine pleuro-pneumonia.

Joint Rinderpest campaign in East Africa — A project request has been submitted to the EEC for funds to support a rinderpest campaign in Somalia as an integrated part of the joint-campaign in East Africa. Such a programme was anticipated in the supplementary assistance to the Training School for Animal Health Assistants by the UNDP, its purpose being to provide pre-campaign training for middle grade rinderpest control personnel, vaccinators and students.

The first phase of the project will be largely confined to the inter-river area; the second, covering the north scheduled to commence in 1969 or 1970, is forecast to be completed in one year. The aim is to vaccinate the entire bovine population over three years.

Parasite treatment centres — Efforts are being pursued in the north to control ticks by dipping and other measures. Similar facilities are as yet unavailable in the south although cattle and cattle exports are concentrated there. The deleterious effects of tick infestation are widely recognised. To redress the imbalance in treatment facilities a project for 30 parasite treatment centres has been envisaged. Many more such centres are required and experience gained from this project should prove invaluable at a subsequent stage. The centres will be established mainly on stock routes, in proximity to markets and on holding grounds.

Since there are already some centres operating in the north, the new centres will be set up in the inter-river area as well as in Mudug, which together contain a large proportion of cattle in the south. The opening up of the centres will be phased over the Programme period.

The parasite treatment centres will be the first of their kind in the south. Because of their pioneer character, no firm estimates on the number of animals that can be treated at each centre or the income gains to be derived can be made.

Purchase and distribution of drugs — Due to limited budgetary support, the Animal Health Department in the past could neither make planned purchases of veterinary supplies nor arrange their systematic distribution to areas of livestock concentration. This often led to artificial drug shortages.

Trading in veterinary supplies is an important assignment of the L.D.A. Deficiencies in the present system cannot be remedied unless special efforts are made to finance this project. Its objectives are to secure funds for the purchase of veterinary supplies and ensure their planned distribution. The purchase and supply department will be a part of the L.D.A. with a central stores at Mogadishu and sub-stores at Burao, Galcaio and Kismayu.

Payments received from the department and proceeds of drugs sales to distributing agents will form the revolving capital of the Agency for future trading and loan repayments. The Agency will add a service charge on the imported price of veterinary drugs and equipment.

Vaccine and Serum Institute — The Veterinary Institute at Merca, with which the Veterinary Laboratory at Hargeisa has been amalgamated since 1966 under the management of the Livestock Development Agency, is mainly concerned with the production of vaccines and sera against the more common animal diseases in the country. Some vaccines are now being prepared for human use also. The types of vaccines now being produced are:

K.A.G. Rinderpest Vaccine
C.B.P.P. Vaccine
Black Quarter Vaccine
Anthrax Vaccine
Antirabic Vaccine (both animal and human)
Anti-tetanus serum (human).

The vaccines which are produced in the Institute are almost wholly supplied to the Government.

The programme of animal disease control which is being emphasised in the context of livestock development has to be based on timely and adequate availability of drugs. It has been recognised for some time now that the Institute at Merca has to be strengthened to meet the requirements of an expanded programme of animal health control. Funds for the construction of a new institute building in Mogadishu have already been provided to the Livestock Development Agency. It is expected that the establishment of the new institute will be completed during the Programme period.

Greater quantities of sera and vaccines will be produced in the new institute and production of new varieties will also be started. The veterinary vaccines will be used mainly by the Department of Animal Health and Production.

A unit for carrying out serological diagnostic work on animal diseases will also be located in the new Vaccine and Serum Institute

Centre for hides, skins and leather. The Department of Animal Health has for many years operated a hides and skins centre to teach tanning techniques. Since 1967 it has been incorporated in a UN Special Fund project. Its activities have now been broadened to include: applied research and training in leather technology and the use of animal by-products; and advisory services on marketing and exports.

It is proposed to establish a sub-station of the centre in the north during the Programme period.

School for Animal Health Assistants. A school for training animal health assistants in a two year course was set up in 1967 at Mogadishu with the assistance of the UN Special Fund. The school has an enrolment capacity of 30 students of whom twenty will be selected from among lay assistants working in the Department of Veterinary Services.

The school will make a limited number of fellowships available to persons who require additional training abroad and will be organisationally related to other institutions specialising in animal health and production activities.

Holding grounds. Animal exports have hitherto taken place directly from stockyards or from grazing grounds where vaccination facilities have not been satisfactory. Quarantine procedures are of prime importance for the preservation and acquisition of high quality markets. Further, with two large meat processing factories, efficiently run holding grounds become an imeprative for it is in these grounds that animals will be vaccinated and dipped under supervision of qualified veterinarians. In addition to the purely health aspects, the animals will also be fed and watered.

In view of limited specialised staff and funds, only four holding grounds are envisaged in the Programme. These are in addition to the holding ground planned in the inter-river area through the assistance of the E.E.C. The proposed sites are in Kismayu, Warmahan, Hargeisa and Burao.

The main objectives of the holding grounds are to provide resting and conditioning facilities for animals purchased for supply to the meat factories and for export; establishment of quarantine facilities to check, under the supervision of qualified veterinarians, on general, infectious and contagious diseases; carrying out vaccination against rinderpest and CBPP; dipping or spraying for external parasites and treatment against trypanosomiasis; ensuring higher producer returns by purchasing stocks at fair prices.

Animals purchased by the L.D.A. from rural markets and those being exported by private traders will pass through these holding grounds. After treatment, animals will be held in different paddocks depending on whether they are for domestic or export markets. Both categories of animals will then finally be transported from the holding grounds in the Agency's transport vehicles to avoid contact with local stock en route; export animals will be delivered to marshalling yards in the harbour and animals for slaughter will be despatched to factories.

The Kismayu holding grounds have a dual purpose: firstly, they are expected to supply the Kismayu meat factory when it becomes operational. At peak working capacity the plant is forecast to absorb 60,000 animals yearly and the L.D.A. will supply the plant's entire livestock requirements; secondly, the L.D.A. has firm offers from abroad for a minimum annual supply of 30,000 heads of animals. There is also likely to be an increase in animal export by private traders.

While the Kismayu holding ground is planned to supply a maximum of 60,000 animals by 1970, it is anticipated that the holding ground planned by the EEC will add to the supply of animals for export. Consequently all processing and export requirements in the Kismayu area will be met by the two holding grounds.

In 1968 the L.D.A. will start purchasing animals at the rate of 2,000 heads monthly, rising to a total of 30,000 in 1969, and attaining full capacity of 60,000 animals by 1970.

Though the scale of operations during the first two years will be below capacity, on the assumption of full capacity operation, costs per animal will work out to about Sh. 270. In addition, some working capital will be required by the Livestock Development Agency to start purchase operations. It is anticipated that working capital will be available for rotation every two months.

Livestock Development Agency — Cattle purchase operations

		1968	*1969*	*1970*
Number of animals purchased (average weight 630 lbs)	(no)	10,000	30,000	60,000
Cost of animals at Sh. 270 per animal including operating costs	(Sh.)	2,700,000	8,100,000	16,200,000
Mortality rate at 2 per cent	(no)	200	600	1,200
Animals available for sale	(no)	9,800	29,400	58,800
Gross income at Sh. 290 per animal	(Sh.)	2,842,000	8,526,000	17,052,000
Gross profit	(Sh.)	142,000	426,000	852,000

Working capital required for the purchase of animals is expected to be available through normal commercial channels and hence is not included as a financial item of the Programme.

It has been suggested that the Warmahan holding ground be located in an area which is already cleared and which can support 300 animals at any moment of time. Animals held there will belong almost exclusively to private traders. They will be compelled to use the holding ground as a result of the proposed veterinary law which stipulates that animals destined for export should pass through a holding ground or a quarantine station. The use of the holding ground will ensure an adequate time lag between inoculation for rinderpest and final examinations prior to export, or despatch to the meat factory in Mogadishu.

It is anticipated that the average animal will be held for one and a half months in the holding ground; it is also presumed that this will lead to a weight gain.

Each animal which enters the ground will be given protective inoculation against trypanosomiasis. Over a period of time, as demand increases, development of the land in the area by selective bush clearing and better range management will increase gains to be derived from this holding ground. A monthly fee of Sh. 6 per animal will be charged for grazing and watering facilities. On a conservative estimate the gross income from the project will be Sh. 22,000 per annum and will be adequate to finance operating costs fully.

Hargeisa and Burao are the two key centres for animal exports from the north. While this region is predominantly important for export of goats and sheep, there is a great potential for cattle exports through Berbera. It is therefore necessary that holding ground facilities be developed in the north as well. The project for two holding grounds, one at Hargeisa and another at Burao, with a holding capacity of 900 and 700 cattle respectively would meet the export trade requirements of the north. The Hargeisa holding ground is forecast to be operational in 1969 and that of Burao in 1970.

Although the Hargeisa holding ground will be operational in 1969, only a fourth of the total annual operating cost of Sh. 20,000 is anticipated to be spent during that year. In 1970, however, a total operating outlay of Sh. 20,000 will be required.

The Burao holding ground will be similar in its financial operations to that of Hargeisa. Because of the phasing in the setting up of holding grounds the operating costs, however will differ. Total cost of the Hargeisa and Burao holding grounds, up to end of 1970 will be Sh. 1,030,000. The income earned from the holding grounds will be sufficient to defray their operating costs.

Stock markets — A further logical step in LDA's decision to supply animals to the Kismayu meat plant is to operate stock markets in adjoining areas. This step must also be seen as an effort to rationalise market operations, since the middleman is reputedly the greatest beneficiary at present, with the producer deriving only marginal gains.

The setting up of stock markets is complementary to holding grounds. It is, however, necessary to keep their operting costs to a minimum. Instead of a permanent staff at all markets, mobile teams will service established markets. Since markets form an integral part of the holding ground operations, cost of maintaining market personnel as well as other operational expenditures are included in the costs of the Kismayu holding ground project.

The following ten stock markets are proposed to be opened up during the Short Term Development Programme.

1968	*1969*	*1970*
Kismayu	Djuma	Lug
Badada	Sareli	Bardere
Balesgogani	Hawai	
Afmadu	Dinsor	

The cost of establishing one market has been estimated at Sh 30,000 on the basis of the cost of Badada livestock market already set up by L.D.A. On this calculation, the cost of establishing the 10 markets during the Programme will be Sh. 300,000.

Annual operating costs of the markets (included under holding grounds project), are as follows:

	(Shs.)
Travelling market staff (19 persons)	52,000
Travelling allowances	10,000
Petrol, oil, lubricants	30,000
Maintenance of buildings	1,000
Total	93,000

Transfer of animals from makets to the holding ground will be done on a contractual basis at the rate of Sh. 2.00 per animal and hence a permanent droving staff is not included in total project staff requirements.

Drying sheds for hides and skins. Most cattle and goat skins originate in the south while the majority of sheep-skins are from the north. The quantity of hides and skins exported and their value, could, undoubtedly be much greater if they were collected, prepared and preserved in a more technically sophisticated manner. It has been recognised that the full potentialities of the hides and skins produced can be exploited only if a carefully planned campaign is launched to teach herdsmen the more modern but still simple techniques of skinning, drying and curing.

One of the immediate projects for improving skins quality will be the introduction of drying sheds with properly designed frames. Ground-drying which is practised widely in this country leads to visible as well as invisible damages like hairslip, taint, blister, etc. The Livestock Development Agency will implement, in collaboration with the technicians of the Training Centre of Hides, Skins and Leather, a project for the establishment of scientifically constructed drying sheds for drying hides and skins in various parts of the country. Not merely will the centres dry hides and skins for the local population, but they will serve as useful demonstration centres.

Drying sheds are to be established during the Programme period in 40 centres and will be phased as follows:

Year	*No. of centres*
1968	10
1969	15
1970	15

Local materials will be used so that foreign exchange will not be required. Each centre will be operated by two persons. In the expenditure estimates, cost of personnel is based on a salary of Sh. 250 per month per person. It is possible with proper coordination of activities between the veterinary services and the Livestock Development Agency, that the work of the centres could be supervised on a part-time basis by personnel of the veterinary services. If this can be achieved, there will be a proportionate reduction in the cost of implementation.

EEC Pilot Project — The realisation of some of the above objectives of livestock development is envisaged in a pilot project financed by an EEC grant.

The scheme covers an approximate area of 60,000 km^2 and lies in a triangle with Lugh Ganane to the north as its vertex and Mogadishu-Kismayu as the base. It is demarcated on the east by the Afgoi-Baidoa road and its western boundary is the Juba river. The project provides for the construction of 40 water reservoirs, each with a capacity of around 21,000 cubic metres; the improvement of about 265 km. of roads, Baidoa-Dinsor-Yak Bravai and Yak Bravai-Boale; construction of tracks parallel to these roads for animal movement; construction and equipment of 4 veterinary centres (at Gasedere, Yak Bravai, Boale, and at a point between Gelib and Avai); construction and equipment of a holding ground in the Mogadishu area, of an approximate extent of 2,800 hectares, capable of acommodating 55,000 head of cattle per year for an average duration of 2 weeks per head construction and equipment of quarantine station of an approximate extent of 60,000 hectares in the Lower Juba, capable of accommodating 7,000 head of cattle at a time for an average duration of 60 days per head; installation of 10 motor pumps at wells located in the pilot area; and technical assistance of a team of experts for a period of 4 years.

The entire cost of the installations and maintenance (except the cost of maintenance of the roads and motor pumps) will be met by the EEC. Watering facilities will be adequate for an estimated 350,000 head of cattle during the 4 months of Gilal. The provisional estimated maintenance costs of the projects (again excluding the maintenance of roads and motor pumps) will be borne by the EEC for the first four years.

Animal Husbandry — Project costs and sources of finance

(Sh. 000)

PROJECT	Domestic			Foreign		Total Project Cost
	Ord. Budget	Addit. Budg. Provision	Other	Grant	Unspecified	
Strengthening veterinary services		725	—	—	1,953	2,678
Rinderpest and CBPP control	304	—	—	—	829	1,133
Joint rinderpest campaign	1,770	125	—	2,540	—	4,435
Parasite treatment centres	—	—	1,119	—	—	1,119
Purchase and distribution of drugs	—	—	300	—	—	300
Vaccine and Serum institute	—	—	1,300	2,800	1,648	5,748
Centre for hides, skins and leather	—	—	1,647	4,171	—	5,818
School for animal health assistants	—	—	2,448	5,643	—	8,091
Holding grounds	—	—	4,542	—	—	4,542
Stock markets	—	—	300	—	—	300
Drying sheds for hides and skins	—	—	1,610	—	—	1,610
E.E.C. Pilot project	—	—	—	10,136	—	10,136
Total	2,074	850	13,266	25,290	4,430	45,910

Chapter 8.

IRRIGATION

The Schebelli and Juba rivers occupy the only large drainage basins in Somalia. Other watercourses, though locally important for water supplies, are relatively small and, in general intermittent. The two rivers rise along the eastern plateaus of Ethiopia, approximately 1,000 Kms. inland from the Indian Ocean. The areas of the drainage basins are estimated at 300,000 Km.^{2} for the Schebelli and 275,000 Kms.^{2} for the Juba, but most of the effective drainage occurs in the upper reaches. In Somalia and the arid border zone of Ethiopia, drainage is limited to a relatively narrow zone adjacent to the rivers. In the highland area of Ethiopia, where most of the flow originates, the drainage areas of the two rivers appear to be similar, with that of the Schebelli perhaps slightly larger than that of the Juba; yet the flow in the Juba is more than twice that of the Schebelli. This is due to differences in precipitation and in the run-off-coefficients.

If the water potential of these two rivers were developed on sound lines, farm output would be greatly expanded. The full harnessing of the Juba and Schebelli will, of course, not be possible during the Programme, but efforts will continue to be directed towards partial control of their waters. A UN Special Fund assisted project encompassing an area of 13,000 hectares of land along the Schebelli is included in the Programme. Preliminary negotiations have been initiated to embark on the orderly development of the Juba with the assistance of an international consortium. Minor irrigation projects assisted by the World Food Programme are included in the section on Community Development.

The Juba

The Juba traverses a distance of 530 Kms. from Dolo to near Kismayu, with a channel lenght of about 730 Kms. From Dolo to near Lugh Ganana for about 120 Kms. of channel, it flows in a wide valley between relatively stable banks. For the next 175 Kms. the valley narrows, the river banks are rocky and the surrounding land is undulating. Thereafter the valley widens and the surrounding hills progressively disappear until, about 40 Kms. upstream of Dugiuma, the flood plain begins. Through this plain the river meanders the remaining distance to the Indian Ocean, about 200 Kms.

The plain is relatively short and narrow compared to the Schebelli flood plain. Moreover, parts of it are broken by low hills and other portions are extremely level and at very low elevations above sea level, making irrigation and drainage difficult and expensive over much of the area. These difficulties are exacerbated by the fact that the soils are generally more saline and less permeable than those along the Schebelli, causing drainage problems in many areas.

The Juba's water flows, both during the high and low flow seasonal period, are greater than these in the Schebelli. Consequently it lends itself to more comprehensive development. However, due to the relatively small area of the flood plain and the soil problems, total irrigable land is about equal to that for which irrigation is available with the flow unregulated. With a regulated flow considerably more water would be available than could be utilized on land adjoining the Juba river.

The urgency for exploiting the Juba springs from the following considerations: a large area (4,200 ha) has already been cleared at great cost for the cultivation of cotton and oil seed; cultivation hinges on irrigation on which some preliminary work has already been done; during the period of the Programme, 350 hectares will be opened up for cotton, serving as a demonstration unit for individual farmers and cooperatives; with available irrigation potential, 265,000 hectares can be brought under production; about 160,000 - 165,000 hectares of high grade land can be cultivated over the next five years (including immediate cultivation of the land which has already been cleared) if headworks and diversion canals are put up.

Preliminary cost studies already made will need evaluation. The phasing of irrigation facilities will depend on the pattern of agricultural development. Coordination of farm and irrigation activities therefore calls for the setting up of a Juba Development Authority. Although realisation of the Juba's irrigation potential involves a long gestation period, a beginning can be made immediately by speeding up the construction of headworks.

Over the long run, agricultural settlement along the Juba will be based on individual farming units or cooperatives. Such a strategy must take into account the availability of controlled water supply; pressure of farmers in the hinterland to move towards new areas of settlement; availability of technical advisory services and extension workers; expansion of basic infrastructure; rational marketing arragements; formulation and implementation of a land tenure programme; and the integration of farm and livestock production.

An estimated 265,000 hectares of land in the Juba valley can be used for irrigated crop production. At present about 1,800 hectares are used for banana cultivation, with a further 500 hectares on these plantations allocated to other crops. Irrigation water is pumped from the river. An additional 22,000 hectares are irrigated through inundation.

While the Juba river basin has been recognised as one of the most important economic regions of Somalia, land and water resources in the area have been insufficiently developed. The river banks being low the channel cannot pass the flood discharge freely and therefore recurring floods are common. While flooding has been exploited for inundated cultivation, the unregulated flows make such cultivation hazardous, particularly in periods of exceptionally high flood.

The first of two studies on the irrigation potential of the Juba was done in 1960 by a US team; a second and more elaborate study was completed by a USSR team in 1963.

The objectives of the USSR survey were: selection of areas to be irrigated by the Juba waters; site selection for water intake for irrigation systems; determination of period required for construction of irrigation systems and development of land for farming; assessment of capital investment, maintenance expenses and returns on investment.

The survey has taken into account: domestic food requirements; extension of cotton production; export of farm primary commodities. It estimated that nearly 27,000 hectares in the Juba basin are irrigated, 21,000 by flooding twice yearly and the remainder by lift-irrigation almost perenially. The area which is under lift-irrigation is devoted to bananas, citrus fruit, coconut and other marketable crops.

The survey also noted that as the river banks are low the channel cannot pass the flood water freely, with the result that there are floods in alternate years. As the Juba basin is still comparatively undeveloped these floods do not affect the economy of the country substantially. The flood of 1961, when all the banana farms in the area were destroyed, was exceptional. Long-term development plans must therefore find a permanent solution to problem of recurrent floods. The U.S.S.R. proposal to remedy this is the construction of a flood retention dam near Bardere.

The major portion of irrigable land lies downstream of Fanole, extending south for some 105 Km. towards Ionte. Its southern most point is approximately 15 Km. from the mouth of the river and 25 Km. from Kismayu. The irrigable area encroaches both banks of the river, but mainly the left bank in the northern half of the area with a slight preponderance on the right bank in the southern half

Total irrigable land is about 165,000 hectares. The soil classification of this area is as follows:

Class I	— 59,400	hectares
Class II	— 45,200	»
Class III	— 42,900	»
Class IV	— 17,500	»
Total	165,000	»

The USSR Survey also examined a second major area upstream of Dugiuma with an irrigable area of over 100,000 hectares.

Out of a total of 265,000 hectares, approximately a half lies between Fanole and Camsuma. The state farms at Gelib are within this area. To provide irrigation for the state farms, a diversion dam sited at Fanole and a canal with a maximum flow capacity of nearly 10 cubic metres per second was envisaged.

The location of the Fanole diversion installation is such that other canals may be led off from above it, on both sides of the river, that would irrigate an additional 65,000 hectares, including approximately 10,000 hectares on the island of Touata which possesses the best soil in the Lower Juba area. A further 15,000 ha. of Class I and II land lie in a relatively narrow strip along the right bank. Reconnaisance surveys have shown that there are no less than 40,000 ha. of Class I and II soils along the left bank.

When the full potential of the Fanole diversion is exploited, a second diversion dam can be constructed in the neighbourhood of Bardere that would irrigate not less than 25,000 ha. of Class I and II land on the right bank between Bardere and Ionte, and of about 20,000 hectares on the left bank.

The final area to be developd, under unregulated flow, would be that on the left bank upstream of Dugiuma. Preliminary surveys suggest that there are between 25,000 - 30,000 hectares of Class I land and between 20,000 - 25,000 hectares of Class II land in this region.

Most lands included in the first two areas described are subject to flooding. Consequently, the cost of land protection measures would be a significant part of the total development costs of these areas. The first mentioned area can be reasonably protected by levees, in conjunction with the embankments of the main canals. It is believed that the second area, lying downstream at Bardere, will be more economically protected by a flood detention reservoir in the river's upper reaches.

The details of the irrigation system and estimated costs as discussed in the USSR Survey are given below. Cost of the flood detention reservoir and dam near Bardere estimated at about Sh. 35 million is proportionately distributed among the irrigation systems. (The alternative of flood control by levees will cost Sh. 92 million).

Details of the Juba irrigation system and estimated costs

Irrigation system	Total area (ha.)	Canal length (km.)	Irr. area (ha.)	Total cost (000 sh.)	Cost 1 ha (sh.)
Fanole-Gelib	53,990	3,834	23,985	118,602	4,945
Touata Island	16,420	2,136	13,300	67,577	5,081
Bardere-Ionte	39,670	5,025	32,200	157,456	4,890
Giamama	40,240	3,208	20,025	110,526	5,519
Digiuma (r. bank)	40,000	5,314	34,000	192,937	5,675
Digiuma (l. bank)	18,000	2,345	15,000	85,001	5,667
Total	208,320	21,862	138,510	732,099	5,286
State farms	16,397				
	224,717				

Three diversion sites and headworks are envisaged at Fanole, Qualiakoko and Saco Uen.

Touata island and the Fanole-Gelib area (including the state farms) will be controlled by the Fanole headworks. The headworks at Qualiakoko will divert water to the Bardere-Ionte and Giamama areas. The areas in Dugiuma will be controlled by headworks located upstream of Saco-Uen. A supply canal will run from these headworks to the Juba-Schebelli inter-river area.

On the basis of all relevant factors the following priorities have been suggested for the development of the Juba valley: lands under the control of the Fanole headworks located to the left of the Gelib main canal; a dam and reservoir at Bardere for flood control; development of the irrigated lands on Touata Island and on the left bank between the river and the Gelib main canal; construction of the Saco-Uen headworks to be used for rice cultivation; construction of the Bardere-Ionte and Giamama irrigation system and the Qualiakoko headworks.

It is expected that full development of these lands will require about 30 years.

On given assumptions of the pattern of cultivation, yield and prices, the following data on anticipated returns are given in the USSR Survey.

Areas	Total investment (000 Shs.)	Estimated annual returns (000 Shs.)
Fanole-Gelib	121,941	16,859
Touata Island	69,654	23,228
Bardere-Ionte	163,383	87,069
Giamama	114,125	41,153
Dugiuma (right bank)	198,271	70,625
Dugiuma (left bank)	87,358	31,175
	754,732	270,109

The flood detention dam and reservoir at Bardere could meet irrigation and power needs in low-flow months. A hydro-power plant (two turbines of 1250 kw. capacity each) is programmed for the Fanole headworks. With natural flow the plant can be operated for 7 months during the year. This can be increased to 10.5 months with the construction of the flood control dam at Bardere.

The Schebelli.

The Uebi Schebelli rises in the high plateau of eastern Ethiopia. Its tributaries drain the eastern slopes of this plateau from Dadala in the southwest to the area east of Harar, a distance of over 500 Kms. The drainage basin is between 900-1000 Kms. long, extending from the Harar plateau to the Indian Ocean. Its area has been estimated at 300,000 Kms.^{2} of which 90,000 Kms.^{2} are within Somalia. From the Harar plateau it flows in a southeasterly direction for about 700 Kms. before entering Somalia at Fer-Fer about 31 Kms. north of Belet Uen. Within Somalia it traverses a distance of about 630 Kms. before its last significant traces disappear about 30 Kms. east of the Juba, and about the same distance from the ocean.

The Schebelli is almost perennial up to Balad, but is dry in its lower reaches for about 2 to 4 months of the year. The river has two well established areas of irrigation: the first 90 Km. north of Mogadishu at Johar and the second 90 Km. south of Mogadishu near Genale. The channel lenght within Somalia is about 1,100 Kms. With minor exceptions, the river receives no contribution within Somalia; the discharge decreases progressively downstream, the flow being reduced by evaporation, infiltration, use and by overbank spilling.

The flow of the Schebelli is torrential, ranging from less than 10 to over 270 cumecs at Belet Uen with high flows of short duration occuring from April to May and of a longer duration from August to December. The low flow period, of less than 50 cumecs, occurs between December and May. The flow decreases progressively downstream as shown by the maximum recorded discharges and channel capacities:

	Maximum recorded discharge (cumecs)	Approx. channel capacity (cumecs)
Belet Uen	281	350
Bulo Burti	276	310
Mahaddei Uen	130	140
Balad	93	105
Afgoi	93	110
Audegle	80	90

The Schebelli's water carries more dissolved solids than that of the Juba. Values of specific conductance, which generally are less than 1,500 micromhos, vary from less than 500 up to 4,000 micromhos. The high values occur after a long, dry spell when the first rains wash the soluble materials that have accumulated along the land surface into the river.

In an average year the Schebelli brings into Somalia about 1,700 million cubic meters of water. This quantity would theoretitically suffice to provide all the water requirements of 60,000 hectares of bananas. The at-farm value of an average annual crop from such an area would be about Sh. 630,000,000. In contrast, the present annual at-farm value of all crops watered by the Schebelli both by inundation and controlled irrigation, is only about Sh. 58,000,000. Although the large gap between the theoretically possible and the actual may never be closed, it can nonetheiess be appreciably reduced.

A storage dam and reservoir could regulate water flow for year round irrigation. The Agricultural and Water Survey which was completed in 1966 by a UNDP/FAO team has pointed out that the only suitable dam site would be 25 Km upstream from Bulo Burti. The estimated cost of construction for this would be approximately Sh 102 million, which would represent an annual cost of amortisation over 50 years at 4 per cent interest, of Sh 4.1 million.

This dam site will be expensive and the rate of silting is expected to be rapid; the reservoir area will be very shallow and lose about half the mean flow through evaporation and seepage. The foundation conditions for the dam site are not known as detailed geological and soils study of the area have not yet been made.

The present methods of water utilisation without a storage dam, can be considerably improved if: optimum use is made of all dependable flows in the 75 per cent year in controlled systems; peak flows which cannot be used for controlled irrigation are diverted into areas where maximum benefit will accrue; necessary inundation irrigation is made to produce the highest possible yield. All these improvements can be utilised to greater advantage if the storage dam eventually proves feasible.

Another aspect of the Schebelli's development which warrants early and careful investigation is the very high water losses which occur annually at times of peak flood discharge. If the storage dam and reservoir are not built, the water cannot be used for controlled irrigation. Although some of this water is useful for inundation irrigation and forage production, most of it is lost through evaporation and infiltration into the coastal dunes. If this water could be diverted to the right bank of the river to water the broad flood plain south and west of Mahaddei Uen, much greater productivity could be expected.

If complete control of the Schebelli is not implemented, a good deal of inundation irrigation will continue since flood waters will flow over much of the flood plain. This method will continue to be of importance in the Gialalassi area, on the right bank between Afgoi and Audegle. Even without building the storage dam for complete flow regulation, it would be possible to irrigate an extra 20,000 hectares of land in the Schebelli flood plain, planted to annual crops. This land could be irrigated in addition to the present irrigated area. It has been suggested by one study that 10,000 hectares of this extra land should be in the Genale area and the remainder in the Bulo Mererta project area.

It has been proposed that it would be reasonable to aim at developing 10,000 hectares within 10 years and to develop the remaining 20,000 hectares subsequently. It has also been recommended that the size of the holdings be set at 5 hectares per family for the original holders, although it could be raised to 10 hectares if experience proves that families can handle the larger areas without too many problems. On the basis of estimated yields and costs, gross returns are about Sh. 10,000 per year per family and net returns about Sh. 6,000. When the 20,000 hectares are developed, the project will provide holdings for about 4,000 families, or about 30,000 people.

Water control and management of the Schebelli

A U.N. Special Fund assisted pilot project is now underway for the water control and management of the Schebelli river. The project will carry out the following studies:

Detailed hydrological studies of the region of the Schebelli river;

A detailed designed scheme covering 3,000 ha. under controlled irrigation and 10,000 ha. under flood irrigation, detailed soil surveys, contour mapping and canal reconstruction;

Ground water survey including test pumping;

Preparation of a comprehensive water management plan, within the framework of the available ground and surface water resources;

Assisting the government in the setting up of a hydrological services covering the entire Schebelli valley;

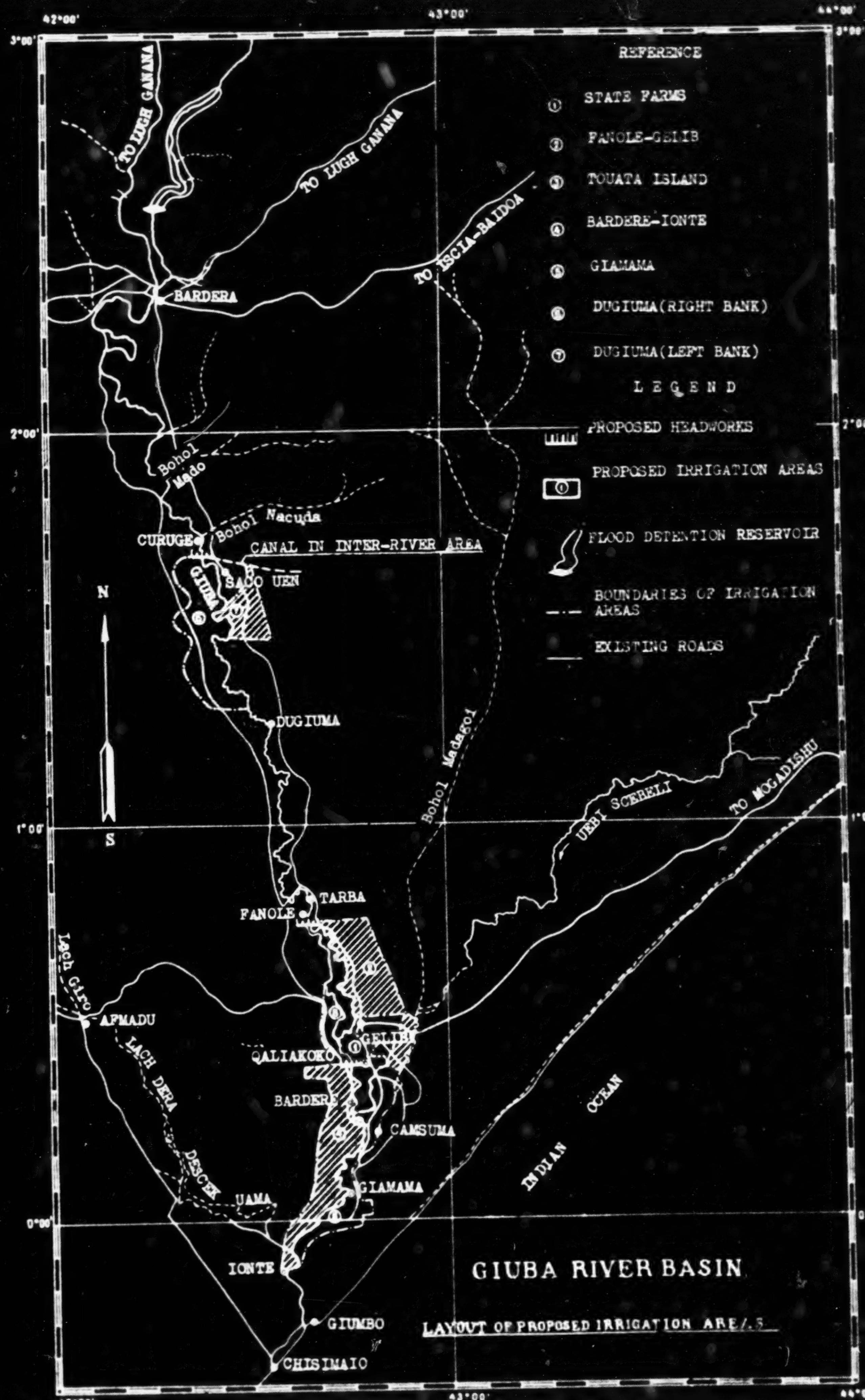
Preparation of a feasibility study of the various parts of the scheme.

The total cost of the project is estimated at Sh. 3.5 million.

Irrigation - Project costs and sources of finance

(Sh. 000)

Project	Domestic Ordinary Budget	Foreign Grant	Total Project Cost
Water control and management of Schebelli	708	2,769	3,477


GIUBA RIVER BASIN
LAYOUT OF PROPOSED IRRIGATION AREAS
REFERENCE
① STATE FARMS
② FANOLE-GELIB
③ TOUATA ISLAND
④ BARDERE-IONTE
⑤ GIAMAMA
⑥ DUGIUMA(RIGHT BANK)
⑦ DUGIUMA(LEFT BANK)
LEGEND
PROPOSED HEADWORKS
PROPOSED IRRIGATION AREAS
FLOOD DETENTION RESERVOIR
BOUNDARIES OF IRRIGATION AREAS
EXISTING ROADS
42°00'
43°00'
44°00'
3°00'
2°00'
1°00'
0°00'
N
S
TO LUGH GANANA
TO LUGH GANANA
TO ISCIA-BAIDOA
BARDERA
Bohol Mado
Bohol Nacuda
CURUGE
CANAL IN INTER-RIVER AREA
GIUBA
SACO UEN
DUGIUMA
Bohol Madagoi
UEBI SCEBELI
TO MOGADISHU
TARBA
FANOLE
Lach Giro
AFMADU
LACH DERA
DESCEK UAMA
GELIB
QALIAKOKO
BARDERE
CAMSUMA
GIAMAMA
INDIAN OCEAN
IONTE
GIUMBO
CHISIMAIO

Chapter 9.

INDUSTRY, POWER AND MINING

A. Setting and Strategy of Development

a) Industry.

The high share of agriculture and livestock in output and exports and the limited numbers employed in the manufacturing sector are indicative of the low level of industrial development and national and per capita income. With allowance for regional deviations and resources endowments the prevailing output and employment structure is not fundamentally different among African sub-regions.

The output and employment structure can be drastically altered through industrialization as evidenced in the unfolding of the development process in the more industrialized countries. Industrialization, which is one of the vital aspect of modernisation moreover becomes a means whereby the agrarian surplus population is shifted into enterprises of higher productivity. Rising levels of industrial productivity will manifest themselves not merely in higher per capita incomes, savings, capital formation and export diversification, but equally in relation to inputs that will inevitably be provided to agriculture in the form of domestically produced fertilisers and mechanical equipment. These will further contribute to raise the levels of productivity of primary output.

Agricultural, livestock and forest output have hitherto been exported in un-processed form. Once again,such a statement is valid not only for our nation but for many developing regions. It is readily apparent that there is substantial scope for import substitution in food products, oils, fats and skins.

One of the features of modern industrialisation is the realisation of economies of scale through large investments in production for a wide market as so dramatically evidenced in the developed market economies and the socialist countries over a relatively recent time span. Such technolgical and market imperatives emphasise the need for African regional and sub-regional co-operation. The details of such co-operation, in form and content, will be the object of studies undertaken during the Programme period. Progress in the industrial sector cannot take place in isolation; it will be helped or hindered by the degree of development in other sectors. Industrial development should not be approached passively but must follow an active strategy of developing within the public and private sectors those branches of industry with the greatest linkage effects on the national economy.

In a developing country like Somalia, the state will be required to assume a vital role in industrialization. This does not, of course, suggest that the Government should initiate and finance all industrial projects as state enterprises, but rather that it should evolve a dynamic industrial policy, particularly in those sectors and branches where the private sector has been reluctant to enter for reasons of financial timidity or economies of scale.

The medium and long term objectives of industrial development in Somalia must take into consideration the expansion and efficient operation of already existing industrial units and the establishment of import substitution industries as well as industries for processing primary products now being exported. These industries may have to be protected for a period but should not be permitted to become permanent high cost producers. Bold measures must be taken from the beginning to ensure that their cost and price structures are ultimately internationally competitive. Our present industrial strategy will be mainly concentrated on consolidating existing industrial plants.

Three important factories are planned to go on stream during the Programme period: the Kismayu meat factory; the Las Koreh fish processing plant, and the Balad textile factory. The construction of a Cement factory will also be initiated while feasibility studies for other industries,will be undertaken.

b) Power.

The structure of present demand does not justify the full-scale utilization of the limited hydro-power potential of Somalia. However, it ought not to be ignored that if the known mineral deposits are to become the basis of planned industrialization, global study and exploitation of both thermal and hydro-electric resources become imperative.

Because of the inter-dependence between electricity generation and industry, mining, agricluture, irrigation and the various social sector users of electricity, enquiries should begin on methods of economic production of electric energy. It is therefore urgent that a concerted effort be made by the electricity survey authorities to examine, in its totality, the hydro-power resources in the country, and blueprint a comprehensive national strategy of power generation.

The overall electricity survey must cover the following problems: analysis of the present power situation, i.e. capacity, technical state of equipment and its shortcomings, distribution and demand; appraisal of future demand for power supplies indicating priorities that exist between the various centres and towns, so that proper phasing can be made in meeting this demand; formulation of proposals for operating power supplies; in particular the establishment of a central body, unification of administration and tariffs; submission of recommendations for an electricity law integrating the north and south.

Absence of standardized equipment coupled to obsolete machinery have thus far been one of the features of power generation This in part stemmed from the pre-independence political structures in which machinery and equipment originated from different countries.

The gains to be derived from power standardization include more rational maintenance, the programming of inventories resulting in costs savings and, as a corollary, an increase in productivity and a cutback in power failures. It has been suggested that new generating equipment should be standardized to supply 3 phase 230 volts 50 cycles per second alternating current. As a first step there should be a phased reduction of inventories for public sector operating plants.

Standardization of equipment must be matched by administrative unification of tariff, management and accounting procedures. Further, uniform statistical practices should be introduced and data for the production, consumption and distribution of electricity systematized.

Serious budgetary constraints demand that priorities be thoroughly worked out since equipment already available in the following centres have not yet been installed:

Area		*Number of sets*	*Capacity Kw*
Hargeisa		2	750
Borama		2	115
Garowe		2	90
Mandera		2	50
Las Anod		2	30
Hobbia		2	30
	Total	12	1,065

The sets are government property and they could operationally raise the public sector's present generating capacity by 30 per cent. The investment implications remain, however, to be worked out by the electricity survey.

In 1962 the power generating capacity was estimated at around 7,000 Kw spread over 15 towns. During the First Five Year Plan period, additional capacity was mainly installed in the larger towns.

At the end of 1967 the total power generating capacity of Somalia was estimated at around 15,500 Kw. The local distribution systems are inefficient and maintenance is inadequate.

One of the major deterrents to the unification of power supply is the absence of a legally constituted central electricity authority. There are no comprehensive laws that effectively control the production, distribution and consumption of power.

The various power stations within the country are owned either by government (northern region), the municipalities (provincial towns in the south), private companies (city of Mogadishu) or individuals (plantations etc.).

Organizational and administrative unification has not been achieved so far and there is hence a dearth of information on generation and distribution of electricity in various parts of the country. The tariff structure for electricity consumption is not unified and is an impediment to economic development. The conspicuous reasons for high costs are inefficient operation of the power stations and distribution system and the cost of imported fuels.

c) Mining.

The development of Somalia's mineral resources is still in the preliminary stage. There are no mineral deposits which are presently being exploited for industrial use. Although high costs of preliminary studies have limited the activities of the private sector to prospecting for petroleum, there is a growing interest in the overall mining potential of the country.

An official report affirms that Somalia possesses the largest deposits of gypsum in the world. If this is so, these resources would provide Somalia with an extraordinary base for the expansion of a modern chemical industry. A modern fertilizer plant based on gypsum would, for example, be able to meet not only domestic requirements of agriculture but would be a source of foreign earnings. If the deposits are as considerable as the initial studies would indicate the inference can be made that the output and export structure of Somalia's economy could be transformed in less than a decade.

Several perfunctory mineral studies were carried out prior to independence. A regional survey covering the British Protectorate was completed in 1951, followed in 1954 by a survey of Somalia's mineral deposits. After independence, the Geological Survey Department of the Somali Republic published the results of preliminary surveys covering the entire country.

Detailed large scale studies began with the UN Special Fund assisted Mineral and Groundwater Survey. It is a dual phased project extending to 1969. The first phase extending from 1964-1967 was to have embraced the country as a whole. Its objective was to organise geological, geochemical and geophysical studies and identify new deposits as well as evaluate known mineral occurences.

Because of skilled manpower constraints, the survey was concentrated in the Bur area which gave indications of promise. An airborn geological survey subsequently identified approximately 50 locations with metallic and radioactive ore. This survey, however, was not followed by geological and geophysical studies. Such studies remain to be carried out for Eastern, Southern and Northern parts of the Bur Region, particularly in the area south-west of Baidoa (Daimir and Bur Galan). According to provisional findings the area has 140-150 million tons of iron ore of up to 40 per cent iron oxide. More detailed studies remain to be carried out to evaluate the commercial and industrial implications of these notable discoveries.

Marble and apatite deposits have also been discovered, but further studies must be carried out to determine their export potential and constructional applications.

In the first phase of the Mineral and Groundwater Survey Project, the already known El Bur high grade sepiolite deposits were studied and quantitatively assessed at several million cubic metres. Already three private investors have shown their interest in them.

Exploration studies in the Northern Region have thus far been limited to reconnaissance work and geological mapping of the basement complex areas. The second phase of the Mineral and Groundwater Survey Project involves extending these exploratory studies.

During the first phase of the Mineral and Groundwater Survey, airborn studies conducted over 23,000 square kilometres of the Bur region revealed some fifty «anomalies», i.e. areas which differed sufficiently from the surrounding terrain to indicate that they were worthy of ground investigations. These investigations led to the location of ore deposits of uranium, thorium and rare earth bearing minerals associated with the «anomalies». The first of these to be located on the ground was uranium ore in the Alio Ghelle area. A quarter of a million tons has been proved on the basis of two drill holes. A third drilling indicates the existence of considerably more tonnage.

Preliminary assessment of laboratory tests of the ore suggests that a viable uranium recovery method can be worked out. Prior to commercial exploitation, however, considerable investment on infrastructure-roads, communications and power — would be necessary. Government policy is to obtain all possible information of these valuable deposits. Commitments for commercial exploitation will therefore not be entered into until the present UN survey is completed and the results fully appraised and publicised.

A coordinated policy will thus have to be evolved in the coming years for the rational exploitation of mineral resources for industrial and commercial use.

One of the objective of the Survey project is manpower training to ensure work continuity upon its expiry.

B. The Projects

a) Industry

Kismayu Meat Factory — Construction of this public sector project, financed with USSR assistance started in 1963 and was physically completed in 1967. At present water supply problems are being tackled successfully. A regular water supply will be available by the end of 1968 upon completion of the Kismayu water supply system.

The factory is expected to have the following production schedule assuring an input of 60,000 heads of cattle annually.

Item	*Annual output* *(In tons)*
Boiled and semi-dried sausages, salted and smoked beef products	300
Canned meat	5,070
By-products	1,800
Total	7,170

In addition to these products, 60,000 pieces of casings and 60,000 pieces of hides will be annually available. It will cater both for the domestic and export market. The plant is expected to go into production during the period covered by the Programme.

Las Koreh Fish Processing Plant. The Las Koreh Fish Processing Plant is expected to be operational in 1969. It is planned to process about 5,000 tons of tuna annually. Raw material requirements (in tons) during an 8-months fishing season (September-April) have been estimated as follows:

Tuna	5,400
Sharks	730
Others	120
Total	6,250

The planned annual out put of the plant, which is financed with USSR credits, is given in the table below:

Las Koreh fish processing plant — Planned annual output

Item	Quantity (In tons)	Unit Price (Sh.)	Total (000 Sh.)
Tuna in olive oil	1,575.0	6,900	10,868
Tuna in olive oil (slices)	245.0	5,520	1,352
Tuna pie	280.0	5,520	1,546
Fish meal	445.0	1,000	445
Fish tallow (oil)	55.4	1,200	66
Liver oil (sharks and tuna)	4.5	2,500	11
Total	2,604.9		14,288

Balad Textile Factory. Construction work began in 1966 and is expected to be completed in 1968. Maximum production capacity will be attained in 1970. The textile factory will process 1,500 tons of cotton fibre annually with an output of about 9.5 million yards of grey bleached and dyed cloth. The plant is a joint venture of Somali and West German private investors and the Somali Government.

During the Programme the main task will be to ensure an adequate supply of domestic raw material for the plant. The agricultural development programme accordingly includes a project for the organization of cotton cultivation, designed primarily to meet the needs of the cotton textile industry.

Cement Factory — The country's unexploited non-metallic resources are immense. Preliminary studies conducted reveal the richness of the country in clay and limestone deposits in Hargeisa, Berbera and Aigoi. Gypsum which is used as an additive to both clay and limestone for the production of cement is available in commercial quantities near Berbera. But in spite of the availability of all the necessary raw materials the brick industry is as yet in its infancy while our requirements of cement are wholly met through imports.

The construction of a cement factory of an annual capacity of 56,000 tons is envisaged in the Programme period. The capital cost of the project is Sh. 25.2 million.

A period of two years is necessary for the construction of the factory. The ideal location for the proposed plant is Berbera, because of its geographic location, improved harbour facilities and the availability of raw material.

Projects under Study — A number of industrial projects are at present under study for the exploitation of our natural resources. The rehabilitation of the salt works at Hordio Hafun is expected to get underway during the Programme. Several studies on this project have been prepared during the past years with a view to restoring production equipment destroyed in 1941. Up to that time the output of the plant was marketed in Japan. Total investment in rehabilitation work is estimated at about Sh. 23 million. Gross-profit is estimated at about Sh. 4 million annually based on an output capacity of 500,000 tons of solar salt.

Feasibility-studies on the establishment of a tomato processing plant, with an anticipated annual capacity of about 800 tons of tomato paste, have been prepared and further studies in the cultivation of tomatoes on a large scale will be undertaken.

In connection with the Kismayu meat factory, the possibility of establishing a tannery at Kismayu is being studied. A capacity of 600 tons of hard skins and 20 million square decimeters of calf skin annually are assumed to be available from the meat plant. An investment of about Sh. 11.2 million will be required for the tannery.

Somalia has abundant gypsum deposits in the Suria Malableh area near Berbera. The deposits could be exploited for export. Necessary capital investments are roughly estimated at about Sh. 12 million. It would also be possible to process this raw material domestically.

In 1967 a feasibility study on the establishment of a corrugated shipping container plant was prepared, for the production of about 13,000 tons of corrugated cardboard containers for banana export, for meat and fish factories as well as for fruit and vegetables. Total investment is estimated at about Sh. 16.8 million.

Industry Projects under study

Project	Annual capacity	Total investment (mill. Sh.)
Rehabilitation of salt works at Hordio Hafun	500,000 tons	23.0
Tomato paste factory	800 tons	4.0
Tannery	600 tons hard skins 20 million sq. decimeters calf skin	11.2
Exploitation of gypsum deposits	n. a.	12.0
Corrugated shipping container plant	13,000 tons	16.8

b) Mining.

UN Special Fund Mineral and Groundwater Survey — The second phase of the Mineral and Groundwater Survey terminating in 1969 ensures the operational continuity of the project. It involves further evaluation of the aero-geophysical anomalies in the Bur Region, a definitive quantitative assessment of the ore bodies by a regional geochemical survey, ground geophysical checks, detailed geological survey and test-drillings. New exploratory studies will also be undertaken at selected locations in the Berbera area by preparatory preinvestment studies. Attention will primarily be focused on the gypsum anhydrite deposits; other occurrences, i.e., tin, pegmatites, beryl, columbitite-tantalite, mica, lead, copper baryte, etc., will also be studied.

Industry, Power and Mining — Project costs and sources of finance

(Sh 000)

PROJECT	DOMESTIC			FOREIGN			Total Project Cost
	Ordinary Budget	Additional Budgetary Provision	Other	Grant	Loan	Unspecified	
Cement factory	—	—	3,400		6,387	15,400	25,187
Mineral and groundwater survey	3,060		—	4,232	—		7,292
Completion of Las Koreh fish processing plant	—	—	—	—	5,380		5,380
Total	3,060	—	3,400	4,232	11,767	15,400	37,859

Chapter 10

BASIC INFRASTRUCTURE

A. The Setting and Strategy of Development.

Somalia inherited a meagre basic infrastructure at the time of independence. Government has since that time given highest priority to this sector, and much has undoubtedly been achieved. But what remains to be done is still considerable.

The existing road system is basically oriented towards servicing the three main ports — Berbera, Mogadishu and Kismayu — and ranges from macadamized all-weather surfaces (less than 10 per cent of total mileage) to unimproved trails.

There are only 10 kms. of first-class roads in the north. The rest are trails that received very little grading during construction. They have deteriorated to a point where the underlying rock-beds have been exposed due to heavy traffic and lack of maintenance. The main function of northern roads continues to be the transportation of sheep, goats and cattle to the export point in Berbera. The two main roads in the region are Hargeisa-Berbera and Burao-Berbera.

Most first-class roads are in the central region, around Mogadishu and the secondary port of Merca, the most important being a new road from Shalambot to Afgoi, (linked to the Afgoi-Mogadishu road which was re-built in 1967) and a paved road from Shalambot to Merca. A macadamized road built by the Italian Administration during World War II runs from Mogadiscio northwest to Fer-Fer on the Ethiopian border.

In the south the paved Gelib-Kismayu road (115 km.) runs parallel to the Juba river; the rest are dirt roads impassable in the rainy season.

Classification of Roads

By class (a)		*Kms.*
First		862
Second		473
Third		2,085
Fourth		6,634
	Total	10,018

There are 45 bridges in Somalia including 32 on the Mogadishu-Fer Fer road and two across the Juba river. Most of them are in good condition.

With the setting up of the Somali Port Authority in 1962, regulatory procedures have been unified and national ports have been classified as follows:

Major ports: Mogadishu, Berbera, Kismayu and Merca.

Minor ports: Brava, Obbia, Bender Beila, Eil, Hafun, Bargal, Hordio, Abo, Alula, Candala, Elayu, Las Koreh, Mait, Heis, Bosaso and Zeila.

Ports have hitherto been basically oriented, as in the case of road transport, to the external sector with very little attention being paid to their utilisation as transport carriers for domestic trade. The port of Mogadishu is the main harbour for imports; Berbera handles mostly animal exports; Kismayu is the exit point of animals and bananas of the Juba area, and Merca handles only bananas of the Shebelli river area.

Berbera is the only natural deep sea harbour but its use has hitherto been limited by inadequate deep-sea berthing facilities. It services the towns of Hargeisa, Burao and their hinterlands.

(a) **First Class roads** include all-weather roads paved bituminous wearing surfaces with an average width of two metres; **Second Class roads** include roads of gravel and crushed stone, generally of low grade construction; **Third Class roads** are earth roads, graded and drained; **Fourth Class roads** are mostly unimproved vehicle trails.

A new deep sea port, financed through USSR credits, is now under construction at Berbera. It is expected to be completed in 1969.

Most of the main hydro-technical installations and other constructional work at Berbera have either been completed or are nearing completion.

The gypsum deposits and the proposed Cement factory are located in proximity to Berbera. The bulk of Somalia's livestock export passes through this port and the provision of berthing facilities will improve the handling of export animals. If the services provided are sufficiently attractive, the new port may be expected to attract ships passing through the Suez Canal.

Mogadishu port serves the most populated area in the country. Its hinterland especially the northern and eastern parts of the inter-river region, has considerable development potential. At present cargo is lightered since the existing piers can accommodate only small coastal vessels. This results in loss and damage of goods and considerable delay in cargo handing.

Merca handles approximately 65 per cent of total banana exports because of its central location in the major banana producing area in the lower Shebelli; the harbour is exposed to the sea and all cargo is lightered.

Kismayu serves the Juba river basin, the Afmadou area and the sourthern zone up to the Kenya border. A deep-sea port capable of handling two vessels each with capacity of 2,000 - 4,000 gross tons has been completed, through a USAID grant.

Somalia is presently served by Somali Airlines and three international carriers; Alitalia, United Arab Airlines and Basco. There are ten airports being used by scheduled carriers in daylight only, including the two international airports at Mogadishu and Hargeisa. There are also a number of landing strips capable of handling smaller aircraft.

Existing Airports

AIRPORT	Elevat above Sea Level (in metres)	Runway (in metres)	Surface of Runway
Mogadishu (International)	.8	2500x 45	Tarmac (all weather)
Hargeisa (International)	1,341	2300x 45	Tarmac (all weather)
Kismayu	30	1000x 45	Gravel
Burao (Internal)	1,031	1150x 55 1200x 55	Clay/Sand
Berbera (Internal)	.9	1500x 33 1200x 50	Gravel/Sand
Galcaio (Internal)	282	1720x200	Gravel/Sand
Gardo	682	1720x200	Gravel/Sparse Grass
Bosaso (Internal)	6	1820x 90 1090x 90	Gravel (all weather)

Source: M. P. C.

Under the International Civil Aviation Organization Convention, there should be flight information centres on a regional basis to serve as ground-to-air navigation aids and coordination of air traffic. The information centres now in operation are: Cairo-Khartoum; Aden-Jeddah-Bahrain-Aden-Nairobi.

Most communication with Europe and other continents are made through the radio link Mogadishu-Rome; the high frequency transmitter is linked with Nairobi and Hargeisa. There is also a radio telephone link between Mogadishu-Aden and Hargeisa-Aden. The existing international radio telegraph link, Mogadishu-Rome and Mogadishu-Zanzibar, uses morse code.

There is a national telegraph network using a high frequency radio transmission. The main line connects Mogadishu to seven other regional centres. Moreover there are also direct connections between some provincial cities and Mogadishu.

The only modern telecommunication centre is the automatic exchange in Mogadishu. Its capacity is fully utilised. In general in all other towns, equipment is poor and capacity limited.

The inefficiency of the postal service stems from inadequate office accommodation, transport facilities, postal equipment and a shortage of trained personnel. A number of post offices are still housed in rented buildings. Owing to transport difficulties most outlaying areas do not have postal services.

The building up and maintenance of a viable transportation and communications network is mandatory for economic growth. This is particularly true of Somalia with its widely dispersed population, extensive coast line and vast hinterland with agricultural, livestock and mineral resources. The Short Term Development Programme envisages a radical extension of the prevailing structure and an improvement of the linkage effects for export oriented industries and the domestic economy as a whole.

The importance of road transport for Somalia's present and future economic development is now widely recognized. A concerted road transport strategy would aim at maximising economic contacts between the ports and the hinterland. Since the road system is at present almost exclusively oriented towards external trade, a coherent road transport strategy should aim at widening the internal market so as to promote modernization and facilitate import substitution.

With regard to ports, the Programme calls for the completion of the Berbera and Kismayu ports and construction of a new deep water harbour at Mogadishu.

With air transport designed to play a crucial role in our economic life, the Programme includes projects for the establishment of a radio navigation aid project and extension of the Mogadishu runway. These do not rule out other improvement and minor extensions in other airports which will be carried out as part of the normal functions of the Ministry of Transport and Communications.

A comprehensive telecommunications programme has been drawn up. It provides for the improvement of the international and inter-urban telephone and telegraph network, local telephone communication and the training of Somalis. There will be an extension of the automatic telephone network in Mogadishu.

A programme for the extension of water supplies for urban and rural areas will receive high priority. At present there are grave administrative bottlenecks, but the setting up of the Water Agency and the strengthening of the Water Department of the Ministry of Public Works would greatly contribute towards overcoming these deficiencies. Although the Water Agency's activities are presently confined to Mogadishu, its functions will be extended on a national scale. Water supply to the nomadic population has been neglected with the familiar and adverse repercussions for man and animal. The Programme lays great emphasis on increasing the availability of water and improving its quality.

In addition to urban and rural water supply projects, the water resources development project financed jointly by government and the USAID will be continued.

B. The Projects.

Highway Development Programme — This is a United Nations Special Fund assisted project in which the I.B.R.D. is the executing agency. The project commenced in 1965 and will be terminated in 1970. Its objective is to build up an efficient highway authority within the Ministry of Public Works to be ultimately staffed by Somalis, and to assist the government in future planning and coordination. A group of experts are now organising and managing this department with increasing Somali participation. The group's terms of reference include maintenance programmes and elaboration of manpower, equipment and financial requirements. Studies are also being made in the transport investment field to enable government to work out a long term programme of transport development. Feasibility studies for improving about 300 kms. of roads connecting the port of Berbera with its hinterland have already been completed.

Afgoi-Baidoa Road — The road is 216 kms, long. It will run through the inter-river region, which is potentially the nation's richest agricultural area, connecting it with the future deep sea port of Mogadishu. It will be a vital link between the main agricultural area and the largest urban areas consequently ensuring accessibility of agricultural products to markets. The contract for the construction of this road has been awarded to a consortium-joint venture and is expected to be completed in 1970.

Hargeisa-Berbera and Burao-Berbera Roads — The bulk of livestock exported to the Middle East is shipped from Berbera which is fed by the two main roads Hargeisa-Berbera and Burao-Berbera. The condition of the present earth roads leaves much to be desired and proper maintenance has been neglected.

At present, livestock are driven on the hoof for long distances to Berbera port or else packed into 7-ton trucks without any consideration to vehicular capacity with deleterious consequences to animals. In the Berbera area where there is inadequate water supply coupled with high temperatures and sparse forage, better road transport would diminish deaths from suffocation and reduce loss in weight and time in transit. Hence the two roads would ensure safe and rapid transit of animals and could thus be synchronised with shipping availabilities at Berbera.

The recommended route for the construction of the Hargeisa-Berbera road is 158 kms., a saving of 12 kms. over the present route. Present traffic is 85 vehicles per day between Berbera and Dubato and 105 between Dubato to Hargeisa. Estimated annual rate of return over cost for the new road is 14 per cent.

The proposed Burao-Berbera road is 141 kms. Present traffic over the existing road is estimated at 43 commercial vehicles daily. However, all indications suggest that this figure is an under-estimate. The region served by the road is very rich in livestock. Construction will commence during the Programme period.

Shalambot-Golwein Road — The proposed all-weather Shalambot- Golwein road extending from Afgoi to Bulo Mererta will create an important link with the banana producing region. The three centres of cultivation are Afgoi, Genale, and Budo Mererta. While the last area has relatively few farms it is a rapidly growing centre of cultivation.

The construction of the road involves the embankment of 37 kms. in level country. Road alignment will follow that of the existing tracks, apart from straightening in certain places where this can be done.

Balad Bridge — Balad, where the textile plant is situated, is a centre of a growing agricultural area. Traffic over the existing Balad bridge is increasing as a result of the expansion of the Johar sugar factory. With the improvement of the Mogadishu-Fer Fer road, this traffic will increase further. The road will be two lane throughout its entire length, except the stretch at Balad bridge which is in the area of highest traffic volume. The Programme therefore includes a project for the construction of a new bridge at Balad. The work is already under way and is expected to be completed in 1969.

Lugh Ganane Bridge — The bridge will replace the present ferry. Designs for the bridge are under consideration by government.

Hargeisa Bridge — At present there are two «Irish bridges» crossing the Tug Marodijeh. The Tug divides Hargeisa into two during rainy weather and causes great inconvenience and hardship. A project for the construction of a new bridge is therefore included in the Programme.

Berbera port — Construction of the new port began in 1965 and is expected to be completed in 1969. It will be 9.75 metres deep with a moorage line of 320 metres; its annual capacity will be 200,000 tons which could eventually be raised to 400,000 if required. This project is financed through credits from the USSR.

Kismayu port — The second phase of the project, involving the construction of administrative and operational facilities as well as a town water supply, is included in the Programme. Final engineering and design work has also been completed and new estimates prepared for the spill-over of the first phase. While the balance of the first phase is financed out of USAID grants, the second is met out of a long term loan from the same source. The project is expected to be completed in 1969.

Mogadishu port — There is a pressing need for providing modern facilities at Mogadishu port as dictated by existing and projected total annual cargo tonnage and value. The urgency for reconstructing the port is underlined by the damage and delays presently caused in cargo handling.

Hydrographically, Mogadishu is the best location in the central zone that is suited to deep-sea port development. The proposed new port will consist of 2 berths capable of handing 300,000 tons of cargo annually. In the initial stage the port will accommodate ships with a 26 feet draft. The project provides for eventual expansion of up to 7 berths.

The anticipated increase in cargo will be mainly due to: natural increase in trade; new trade and trade diversion, particularly export of bananas now shipped through the port of Merca.

Flight information centre — The government has decided to set up its own flight information centre. The first phase of the project was financed out of the ordinary budget, and is now complete. Plans have been worked out to establish a complete modern centre in the second phase.

The breakdown of the cost of this second phase is as follows:

	Sh. million
Transmitting station	2.6
Terminal building equipment	0.2
Receiving station	1.1
Communication centre	0.5
General	0.8
Installation and maintenance	0.9

Radio Navigation Aids — The absence of proper supporting ground lights, radio and navigation aids seriously impairs airport facilities at Mogadishu, Kismayu, Beletwein, Galcaio, Gardo, Bur and Bosaso. The USAID assisted project for radio navigation equipment is expected to overcome these deficiencies.

Extension: Mogadishu Airport — The new airport was completed in 1967. It suffers from two main technical defects. The capacity of the terminal building is inadequate to handle estimated 1968-70 traffic increase. The length and strength of the present runway does not permit increased traffic with larger aircraft.

Due to the importance of Mogadishu airport, the government intends to extend the runway during the Programme.

Telecommunications development programme — This programme envisages the improvement of the international telecommunications network, the inter-urban telephone and telegraph network, the installation of urban automatic telephone exchanges and the training of national technical personnel.

The project for the international network involves the opening up of new links with Zanzibar and Aden and improvement of the existing communications with Rome. The inter-urban project envisages the organisation of modern telephone and telegraph connections in all regional centres using multichannel carrier equipment for long distance calls. As it is possible to utilize fully inter-urban channels without a properly developed local network, automatic telephone exchanges are to be installed in major regional centres.

Introduction of modern equipment will require trained technical staff for their maintenance. A sufficient number of Somali telecommunication engineers are due back from training abroad. The project will draw on these qualified technicians for high level manpower requirements. Local technical institutes will be the sources of supply for skilled middle level staff. Allowance is also made in the project for on-the-job training and fellowship requirements.

Extension of Mogadishu telephone network — the newer residential and commercial centres of Mogadishu are rapidly expanding and the capacity of the existing telephone system cannot accommodate the increasing demand. It is therefore proposed to expand the capacity of the network during the Programme period.

Postal services — The Programme provides for the construction of a new post office building in Mogadishu and six more in other urban centres.

Urban water supply — Projects included under this head cover the cities of Mogadishu, Kismayu and Hargeisa. Mogadishu water supply system will use a groundwater source. In the first stage 4 wells on the outskirts of Mogadishu and 13 wells along the Balad road will be drilled. Transmission mains will collect the output of individual wells and convey it from the well-fields to storage centres.

A treatment installation will have chlorine feeding and measuring equipment in a secure, limited-access building. Diesel fuel storage tanks, chlorine cylinder unloading equipment, and storage areas will be located near the building and the entire treatment installation will be protectively enclosed. A distribution system of area and ward feeder mains, neighbourhood networks, public fountains, distribution storage booster pumps and related equipment and facilities will be constructed.

Administrative and operating facilities will consist of material storage yards, repair and maintenance shops, quality control equipment and structure.

Technical and managerial services will include engineering services to conduct limited feasibility studies within the overal projects designing and developing production wells, location of reserves, designing of facilities, awarding contracts and provision of general management and personnel training. Management consultant services by a team of experienced American water utility management personnel will assist in establishing and initially operating a water supply utility organisation for Mogadishu.

The feasibility study of the project envisages that 2500 houses and community water points will be supplied with potable water in the initial stage. Subsequent stages, to be implemented as demand arises, will be financed out of the earnings of the Water Agency.

The Kismayu water supply project is incorporated in phase two of the Kismayu port project. It consists of administrative and operational facilities required to complete the port development programme at Kismayu and water and power supply systems for both city and port.

The total capacity of the water system is calculated at 1,600 gallons per minute and an operating day of 18 hours.

The breakdown of the project cost is as follows:

	Sh. million
Water distribution	17.6
Treatment plant	5.9
Water intake system	0.9

The project is being financed out of a long term USAID loan

Hargeisa's present water supply is obtained from a large number of scattered wells on the Marodijeh Tug. The yield of these wells fluctuates considerably throughout the year as they are entirely dependent for recharge on irregular and infrequent floods during the rainy season. A reliable water supply is vital for the expansion and development of Hargeisa town and the location of industrial plants in the area.

A three stage water supply project with a 4.5 million gallon capacity per day envisages the use of Dikrile reservior, Dibrawin spring and Durdur intake as sources of supply. The first phase of this project, to be implemented during the period of the Programme will assure a daily supply of 1.5 million gallons from the Dibrawin spring.

Rural Water Supply — The projects included in the Programme for rural water supply consist of the following:

Construction of 100 pumping stations

Purchase of 50 water pumps

Multi-purpose community development project for rural water supply.

The Ministry of Public Works has made a preliminary study for the provision of 100 water points in those areas that suffer most from water shortage.

The suggested distribution of wells over the different regions is as following:

Regions		*No. of wells*
Lower Juba		10
Upper Juba		12
Hargeisa		12
Mudugh		15
Burao		15
Hiran		10
Benadir		14
Migiurtinia		12
	Total	100

In the multi-purpose community development projects assisted by the World Food Programme, provision has been made for the construction of 75 shallow wells and 75 masonry tanks, both for drinking water. Details of these are discussed in the section on Community Development.

Water resources development project — In the initial stage the aim of the project will be the rehabilitation of disused wells and improvement in the standards of maintenance and operations of the others. The ultimate goal of the project is the establishment of a supervisory staff in Mogadishu and a regional office in each of the 8 regions of the Republic. The Mogadishu staff will be responsible for the overall planning and direction of the rural water programme and will consist of technical, administrative, supply and shop sections. Each of the regional offices will be in charge of a superintendent who will supervise a maintenance and repair crew. Three surface works crews operating under the Mogadishu staff will be on call for assisting regional superintendents in the construction of storage tanks, pump houses, stock watering troughs and related works.

Basic infrastructure — Project costs and sources of finance (*Sh. 000*)

PROJECT	DOMESTIC		FOREIGN			
	Ordinary Budget	Additional Budgetary Provision	Grant	Loan	Unspecified	Total Project Cost
Roads	**2,163**	**3,570**	**32,610**	**60,690**	**92,274**	**191,307**
Highway development programme	2,163	—	5,338		—	7,501
Aigoi-Baidoa	—	3,570	16,065	60,690	—	80,325
Hargeisa-Berbera	—	—			49,959	49,959
Burao-Berbera	—	—			42,315	42,315
Shalambot-Goluen	—	—	11,207		—	11,207
Bridges	—	—	**6,411**	**—**	**—**	**6,411**
Balad	—	—	1,107		—	1,107
Lugh Ganane	—	—	2,339		—	2,339
Hargeisa	—	—	2,965		—	2,965
Ports	—	—	**4,820**	**30,305**	**110,275**	**145,400**
Berbera	—	—		12,380	—	12,380
Kismayu	—	—	4,820	17,925		22,745
Mogadishu	—	—			110,275	110,275
Civil Aviation	**140**	**920**	**693**	**—**	**10,189**	**11,942**
Flight information centre	—	920		—	5,189	6,109
Radio navigation aid	140	—	693	—	—	833
Expansion of Mogadishu airport	—	—		—	5,000	5,000

(Sh. 000)

PROJECT	DOMESTIC		FOREIGN			Total Project Cost
	Ordinary Budget	Additional Budgetary Provision	Grant	Loan	Unspecified	
Telecommunications	—	—	**19,159**	**4,814**	**—**	**23,973**
Development programme	—	—	19,159	2,464	—	21,623
Extension of Mogadishu telephone network	—	—		2,350	—	2,350
Postal services	**—**	**1,300**	**—**	**—**	**—**	**1,300**
Postal headquarters Mogadishu	—	1,000				1,000
6 Post office buildings	—	300		—	—	300
Water supplies	**4,477**	**—**	**1,718**	**59,915**	**51,220**	**117,330**
Urban water						
Mogadishu	4,380	—		35,000		39,380
Kismayu	—	—		24,915		24,915
Hargeisa	—	—			39,220	39,220
Rural water	—	—			12,000	12,000
Water resources development	97	—	1,718			1,815
Total	6,780	5,790	65,411	155,724	263,958	497,663

Chapter 11.

SOCIAL INFRASTRUCTURE

A. The Setting and Strategy of Development

a. Education.

It is now widely recognised that education and economic growth are inextricably related. Education is not an end in itself but a means to an end, and the framing of an educational strategy must be undertaken within the broader perspective of economic growth.

In the years before independence little attention was centred on far reaching reforms in education and on other aspects of social life. Important strides have been made in the social sector since independence, but what remains to be done is nothing short of prodigious.

On the assumption that the total population of the country is around 3 million, enrolment at all three levels of education (primary, intermediate and secondary) is a mere one per cent of this total. This is indicative of the dimension of the challenge facing government in the field of education.

The following table indicates that compared to 5355 pupils enrolled in grade I, the number in grade XII is only 141. High drop out rates, which is one of the factors responsible for this phenomenon, has been a dominant feature of education in Somalia. Since secondary school pupils constitute the backbone of higher professional manpower, efforts must be directed to reduce this excessive waste in human and financial resources.

Current Primary Enrolment by Class and by Province, 1967

(Government Schools)

GRADE	Benadir	Hiran	Upper Juba	Lower Juba	Mudugh	Mijur-tinia	N. E.	N. W.	Total
	R E G I O N S								
Elementary									
Grade I	2612	338	909	444	512	466	49	25	5355
Grade II	2478	301	642	384	355	258	266	1303	5987
Grade III	2237	200	536	270	339	177	503	1239	5501
Grade IV	1464	168	356	211	193	139	392	1284	4207
Total Elementary	8791	1007	2443	1309	1399	1040	1210	3851	21050
Intermediate									
Grade V	1274	93	225	64	48	63	156	476	2399
Grade VI	1310	59	101	81	44	25	328	463	2411
Grade VII	807	43	62	48	41	24	302	637	1964
Grade VIII	170	38	38	37	44	20	143	268	758
Total Intermediate	3561	233	426	230	177	132	929	1844	7532

GRADE	REGIONS Benadir	Hiran	Upper Juba	Lower Juba	Mudugh	Mijurtinia	N. E.	N. W.	Total
Secondary and Teacher Training									
Grade IX	597	—	—	—	—	—	45	333	975
Grade X	456	—	—	—	—	—	58	166	680
Grade XI	324	—	—	—	—	—	9	89	422
Grade XII	82	—	—	—	—	—	—	59	141
Total Secondary and Teacher Training	1459						112	647	2218
Grand Total	13811	1240	2869	1539	1576	1172	2251	6342	30800
Percentage to total of:									
Elementary	64	81	85	85	89	89	54	61	68
Intermediate	25	19	15	15	11	11	41	29	25
Secondary	11	—	—	—	—	—	5	10	7
	100	100	100	100	100	100	100	100	100

Source: Ministry of Education

Apart from the very low overall level of primary enrolment another glaring feature is the regional imbalance. Benadir alone has approximately 42 per cent of total primary enrolment. Also the share of females is only 23 per cent of the total. Raising the level of female enrolment will go a long way in furthering the social emancipation of Somali women and in productively improving the level of human resources.

Level of Primary Enrolment — 1967

REGION	ENROLLED			Girls as a percentage of Total
	Total	Boys	Girls	
Benadir	8,791	6,239	2,552	29
Hiran	1,007	805	202	20
Upper Juba	2,443	1,945	498	20
Lower Juba	1,309	1,028	281	22
Mudugh	1,399	1,019	380	27
Mijurtinia	1,040	847	193	19
N. Eastern	1,210	1,052	158	13
N. Western	3,851	3,181	670	17
Total	21,050	16,116	4,934	23

Source: Ministry of Education.

The financial implications of budgetary allocations to education are examined in the chapter on Public Finance.

Independent Somalia inherited two diverse systems of education. The problems arising from the unification of these two systems have been overcome to a large extent. Centralized examinations for elementary school pupils were instituted in the south in 1967 on an experimental basis, and results have so far been promising. New measures are being taken to ensure that the high drop out rates are curtailed. Preparation of textbooks for intermediate schools still remains a serious problem, but efforts are now being directed to prepare appropriate texts with UNESCO's assistance. Textbooks in Arabic are also being prepared through a special committee.

It is a long term objective to introduce free compulsory primary education. Such an objective, however, is also tempered by the awareness that there are overriding budgetary and financial constraints, and that educational advance must take cognizance of the sheer bulk of the nomadic population. Educational advances must partner other indispensable economic and social reforms, such as the sedentarisation of nomads. Further, it must be borne in mind that Somalia's population is relatively small and widely dispersed. An educational revolution is thus predicated on wider changes within the social and economic structure.

Revamping of the educational system will inevitably take time, but the process of unification that has got underway is a pointer in the right direction. An enlarged educational base will make for greater national cohesion, consolidate the foundations of our democracy and open up large avenues of mass communication, consequently generating an informed public dialogue. Any educational strategy must be appraised within a specific socio-economic context and it is necessary to recognize that in terms of income and employment, agriculture and livestock raising are of paramount importance to Somalia.

The application of technology to farming and livestock improvement can be taught and translated into practice in the school. Instead of germinating a spirit of contempt for the traditional farmer or nomad, students should be able to learn empirically from them and in turn enrich them by their experience. This process of relating primary education to actual life is a colosally dynamic force with great potential for national output, by its very nature it can create cooperative and purposive effort.

Contempt for manual labour is merely one of the formidable survivals of the colonial period. And it is here that a bold and imaginative politico-educational strategy can play a positive contributory role. In this way our primary education will gradually become more democratized, and not merely a mechanism by which the pupil who successfully passes the requisite formal examinations is automatically propelled into secondary schools. A strategy of educational advance must equally recognize the need of an employment policy if the Somalis now studying abroad, are to be effectively fitted into the national framework.

The Short Term Development Programme will pay specific attention to the following points:

- unify the public school system throughout the nation, based on a common language of instruction. Such unification requires time, but it is hoped that it will have been completed by the academic year 1973 - 74;

introduce a common syllabus for each type of school. This goes beyond the confines of the Programme period;

achieve uniform standards for all secondary school pupils leading ultimately to internationally recognized school leaving certificates. It is expected that this will be achieved in the north during the Programme period, and can be started in the south. However, a six year period is required for the entire nation;

lay the foundation for higher education by the establishment of a central board of higher education. A college of education will be inaugurated and consideration will be given to the upgrading of other institutions such as the University Institute and the School for Animal Health Assistants. Academic staff requirements are expected to be provided through foreign aid. A number of Somalis will also be sent abroad for special training.

expand adult education under the direction of the National Board of Adult Education;

provide all schools with buildings and equipment that would meet minimum standards of quality;

ensure an adequate supply of text books and other teaching materials. In the Programme period, major efforts will be made to establish a printing press within the Ministry of Education, inaugurate a committee of text book writers under the auspices of a text book preparation unit in the Ministry of Education; continue the work of the audio-visual unit with the assistance of the National Centre.

Somalize the teaching personnel in all elementary and intermediate schools. The time span envisaged for this extends beyond the Programme period and will be underpinned by the UNICEF/UNESCO project for in-service teacher training, the National Teacher Education Centre (NTEC) and the College of Education when it becomes operational.

begin the Somalization of teaching personnel at the secondary level. This will necessarily extend beyond 1970 since the first Somali graduate teachers will be available only in 1972. In turn, they will be supplemented by secondary school teachers who will have completed their studies abroad;

integrate academic levels of private schools into a national educational system. The period required for such integration will extend, however, beyond the duration of the Programme;

overhaul the present educational administrative machinery at both the central and regional levels.

b. Manpower, employment and training.

The first manpower survey was conducted in 1964 in 5 towns, 3 in the north and 2 in the south. This survey covered employers employing 5 or more persons in the private sector and almost all government department and autonomous agencies in the public sector. A manpower budget was prepared on the basis of the results of this survey, and the requirements worked out largely on the basis of the projects included in the First Five Year Plan.

In the absence of a comprehensive population census it is not possible to work out any precise estimate of the labour force. A highly tentative estimate on the basis of an assumed population of 2.3 million in 1963 suggests that about 51 per cent of males and 2[illegible] per cent of females were in the labour force with an overall rate of 38 per cent. The labour force in the working age group (15-59) was, however, only 35 per cent of the total population.

An estimated 85 per cent of the labour force in 1963 was engaged in stock raising, agriculture, forestry and fishing, 3 per cent in industry and 12 per cent in the tertiary sector. About 14 per cent of the population was in the modern sector and around 19 per cent in towns of 5,000 or more persons. By 1970, the population and labour force, assuming a 2.5 per cent growth rate, should be about 2.7 million and one million respectively. The labour force in the working age group (15-59) which is more relevant for the purpose of planning the creation of additional jobs should be about 820 and 890 thousand in 1967 and 1970 respectively.

It was estimated that the First Five Year Plan should have generated new employment for about 30,000 persons in all sectors. However, there have been shortfalls in employment generation during that period. The Programme thus faces an unemployment backlog. Available estimates suggest that up to 1966 additional employment in units employing five or more persons was at best marginal.

There has been an ever increasing flow of persons from the rural areas to towns in search of employment since independence. Recent findings suggest that the major reasons for the urban influx, particularly in Mogadishu, were: large construction projects in 1963 and 1964 which needed and attracted unskilled labour from rural areas; the 1964-65 drought which compelled many to migrate to the urban centres in quest of food and water; the lack of employment opportunities, rigours of subsistence agriculture and animal husbandry; the relative attractiveness of urban life with its better educational, medical and other cultural facilities and higher job expectations.

Unemployment is marked in urban areas, notably in Mogadishu where the migration from rural areas has been reinforced by the influx from Aden, Djibuti, the Ogaden and N.F.D.

In the absence of facilities for university education in Somalia, all higher education is pursued abroad, mainly through scholarships and fellowships. Nearly 1,500 students are pursuing studies in about 60 different disciplines in some 30 countries; of these 900 are expected to complete their training during the Programme period.

Because of the lack of proper manpower planning in the past there have been some imbalances in the manpower availability and the utilization of scholarships. With the setting up of a manpower section in the Ministry of Planning and Coordination attempts are now being made to gear higher education and training abroad to manpower needs. A draft Scholarships and Fellowships Law has also been prepared to control and administer the scholarship and fellowship programme. A procedure has been laid down to control the departure of selected students and obtain information about returning trainees. This will ensure building up of different records of the high level manpower availabilities at different points of time.

Only a small proportion of the students studying abroad are being trained as middle level technicians. Thus in 1966, while more than 200 students were pursuing engineering degree courses, number of engineering technicians under training were only 65. Again, the scholarships programme is at present scattered in 30 different countries with widely varying instructional techniques and language media which raises the thorny problem of degree equivalents.

Apart from spasmodic training courses organised by different ministries arrangements for upgrading employed manpower exist in a few ministries on a quasi-permanent basis. The Ministry of Health runs a training scheme for various types of medical auxiliaries; the Ministry of Education has two institutes for upgrading unqualified teachers; the Directorate of Personnel and Establishment operates the Somali Institute of Public Administration to provide in-service training to various grades of civil servants; and the Ministry of Agriculture has organised a farmer training centre at Borka. The Ministry of Communications and Transport has arrangements for the training of some categories of civil aviation staff. The School for Animal Health Assistants will start graduating students at post secondary level from 1969 onwards.

The problem of qualified graduates and others returning from abroad has assumed considerable magnitudes. Most of them have ultimately to be absorbed in the public sector. As a first step, therefore, vacant Grade A posts in ministries and autonomous agencies will as far as possible be reserved for them. Administrative arrangements will also be made to facilitate their placement both in the public and private sectors.

The generous assistance given by international agencies and foreign friendly countries is not unlimited and therefore should be put to optimum use. The Manpower Section in the Ministry of Planning and Coordination will be strengthened during the Programme in order that the Scholarships and Fellowships draft bill when passed into law, will be administered in accordance with national manpower priorities and the imbalances that have occured in the past, will be rectified.

The existing training procedures in various ministries will be systematized and further ameliorative measures taken. A training school for postal personnel will be set up and by the end of the Programme period about 100 officials will have been trained. The training arrangements for health personnel will also be augmented so that the present shortage of auxiliary personnel may be overcome.

The Somali Labour Code provides for regulating employment of apprentices. Yet their employment in the private sector on a regular and formal basis is almost nonexistent. Every effort will be made to persuade reasonably large industrial undertakings to introduce an apprenticeship system which could serve as a springboard for Somalizing employment opportunities.

The availability of middle-level technicians and skilled workers at the craftsmen and artisan level is indispensable for industrial development. There are three secondary level technical institutes at Hargeisa, Burao and Mogadishu for training middle-level technicians. There is also a technical secondary school in Mogadishu for draughtsmen, book-keepers, and accounts and office clerks. About 90 draughtsmen, 70 book-keepers and accounts officers, 115 general and motor mechanics and 45 electricians will complete their training in these schools during the Programme. The dearth of middle-level technicians will be further eased with the return of similar categories now undergoing training abroad. A comprehensive survey will be made of the additional requirements for skilled craftsmen.

Present shortages cannot be solved by training facilities alone. Employed persons have often been found to be averse to any formal training, considering themselves either too old or too senior, or are not sufficiently motivated to attend instructional courses. Consequently, many an in-service training programme has foundered. To counter this, consideration will be given to the introduction of an incentive scheme to persons who complete in-service training courses successfully.

One important objective of our social and economic policy is the Somalization of employment without detrimental repercussions on the national economy. Two laws already exist in this regard: Article 17 of the Foreign Investment Law, 1960, as amended in 1968, stipulates that unskilled foreign personnel should not exceed five per cent of Somalis employed in an establishment and that normally no foreigner shall be employed against a job for which a suitable Somali is available. It also enjoins employers to hire Somali personnel to the maximum extent possible and provide for their inservice training. Article 54 of the 1966 Immigration Law also specifies that non-citizens cannot be employed unless a work permit has been obtained.

It is felt that the objective of Somalization can and should be achieved through effective working of these Laws. A draft procedure and some guidelines have been drawn up for their enforcement in an orderly and systematic way.

The therapeutic to the problem of migration from rural to urban areas consists of enlarging rural employment opportunities. This is, however, a complex problem which cannot be resolved during the Programme period. The rural multi-purpose projects, included in the section on Community Development, are designed to use labour-intensive techniques subject to the consideration of cost, speed and productivity.

While the Somali Labour Code of 1958 is a comprehensive document, conditions since independence have changed to warrant its review and revision. Enactment of labour laws is of purely ephemeral significance unless they are effectively enforced and implemented. To this end government proposes to diffuse the labour inspectorates more widely and provide the staff with training facilities, better equipment and transport. With the setting up of more labour inspectorates during the Programme, maximum possible assistance will be given to parties to further inculcate the spirit of collective bargaining. The Labour Code provides for the establishment of a tripartite Central Labour Commission to counsel government on labour problems and policies. This Commission is at present moribund and efforts will be made to re-activise it during the Programme period so that in the application of the objectives of the employment policies the concerned interests are fully consulted. In the revision of the Labour Code attention will be given to the provisions concerning the organisation and functioning of trade unions so as to lend them as much support as possible in the discharge of their legitimate functions.

While employment maximisation is one of the basic objectives of national economic development, in view of the limited objectives we have charted in the Programme, the projects incorporated therein have not necessarily been selected with a view to enlarging the labour market. The Programme is intended to ensure the completion and implementation of the on-going projects and to create some basic infrastructure. While it will undoubtedly create many more jobs, the total addition to employment is expected to be modest. In the absence of basic information about gross domestic product, labour productivity, employment in relation to investment, output, growth, etc., precise quantification of the employment generation and the manpower situation of various categories of persons during the Programme period is not possible. However, on the basis of the available information it has been estimated that in so far as the availability of technical manpower is concerned there should not be major bottle-necks in the implementation of the envisaged projects except in some occupations. Steps have already been taken and attempts will continue to be made to train the required categories of manpower so that obstacles to the successful implementation of the Programme are removed.

Our main goals in employment and training during the Programme period have been realistically framed:

- the formulation of a policy directed towards the absorption of returning graduates;
- a rational approach towards the future utilization of scholarships and fellowships;
- improvement and upgrading of employed manpower;
- training of middle level technicians;
- the formulation of an incentive mechanism based on merit;
- Somalization of employment;
- measures to discourage the exodus from rural to urban areas;
- review of existing labour legislation;
- new manpower survey;
- establishment of rehabilitation and welfare centres.

c. Health.

The restricted expansion of health services in the past has been due to severe financial constraints in relation to the magnitude of the task involved. Despite these constraints improvements have been made and is partly due to the assistance received from international organizations and friendly countries.

In recent years three modern hospitals were opened at Mogadishu, Wagit and Sheikh. The hospital in Mogadishu was set up with the assistance of the European Economic Community and has 604 beds. The Wagit and Sheikh hospitals built with the assistance of the U.S.S.R. have a bed capacity of 50 each. A 20-bed maternity ward was added to the Group Hospital in Hargeisa and a model ward with a bed capacity of 20 was built by the Hargeisa local administration to be used largely as a training ward for the Hargeisa school of nursing. Twenty new dispensaries: 5 in the north and 15 in the south were also established; three maternity and child health centres opened in the north and a basic health centre was started at Ba'lad in the south. A central public health centre with modern equipment was also inaugurated in Mogadishu.

To face up to the dearth of professional medical personnel a large number of scholarships was allocated for medical studies. By the end of 1967 about 180 students were studying for degree courses in medicine, dentistry etc. and 24 students were in pharmacy degree courses. Of these 89 doctors and 20 pharmacists are expected to return during the Programme.

The present number of hospitals, infirmaries, and ambulatories is shown in the following table:

HOSPITAL	Number	Number of beds	Number of Doctors
General	18	2361	62
T. B.	4	1250	10
Mental	1	65	1
Leprosy	1	350	1
Infirmaries			
General	36	528	3
Ambulatories	160		9
		4,554	86(a)

(a) Of these 17 are Somalis.

The Health Training Institute in Mogadiscio, operated with the assistance of WHO/UNICEF had trained by the end of 1967 about 700 existing persons of various specialities: health superintendents, public health nurses, sanitarians, X-ray and pharmacy technicians. The courses vary from two to three months. As a sufficient number of these specialists were trained the programme has been modified to meet the requirements of personnel in the curative field. There are a number of such employees in service who will benefit from an organised course. Although these persons have had some practical training such training was unsystematic. The first batch of trainees were enrolled in the last quarter of 1967.

The entrance requirements of the Hargeisa School of Nursing are post intermediate standards. The first group graduated in October 1967; the school is intented to train professional nurses meeting international standards.

The World Health Organization is assisting in programmes for malaria and tuberculosis control, small pox eradication, organisation of medical care, public health laboratory services, nursing education, and training of dental assistants. Support to the Mogadishu Health Training Institute is expected to continue during the Programme.

Considerable progress has been made in malaria preeradication and tuberculosis control projects. The former commenced in 1962 and coordinates the development of the national malaria service and the rural health services as a prelude to mounting a countrywide eradication programme. The latter, initiated in 1960, operates a centre in Mogadishu, and will in due course be extended to other parts of the country. A combined mass campaign for BCG and small pox vaccination was inaugurated in the north and it is also planned to extend it on a nationwide scale.

d. Community development and social welfare.

There can be no two opinions about the need for securing maximum participation of the masses in the general efforts for economic and social development, particularly in developing countries. This participation is necessary not only to maximise efforts through optimum utilisation of available manpower but more so to engender the removal of social institutions, practices and customs which are deterrents to progress. Without such participation developmental efforts are unlikely to produce enduring and meaningful results.

The importance of community development for economic and social progress is fully recognised. Government policy has always emphasised the need for «nation-building» programmes. This has been confirmed by the creation of a separate Ministry of Rural Development charged with organising community development schemes.

Some efforts, though largely sporadic, have been made in the past few years to organise construction and other works on a self help basis. The most spectacular and successful of these relate to the school-building programme of the Ministry of Education through self-help measures. This is a joint venture in which the government, the USAID and local communities and Municipalities have cooperated to build new low-cost functional schools or class-rooms in existing schools. The popularity of the schemes has outpaced the capacity of the Ministry of Education to cope with demand in various areas. Enthusiasm has been so great that some communities did not even wait for the government's help and by their own efforts and resources built about 60 class-rooms.

The experience of the organisers of the self-help school building programme and other community development projects has demonstrated that there is a reservoir of enthusiasm amongst local people that can be tapped; if intail help is provided.

As a first step in this direction, provision is made in the Programme for a multipurpose community development project. The self help school building programme, involving the construction of some 300 elementary and intermediate school class rooms is a USAID assisted project. The remaining eleven are assisted through the World Food Programme (WFP).

This is the first time in Somalia that projects are being undertaken through WFP assistance. The extension of such assistance into other spheres of community development will therefore perforce depend on the degree of success achieved in the implementation of these projects, particularly so since they involve a relatively higher burden on the budget.

Six more projects submitted for WFP assistance and still under consideration include schemes for land clearance and cultivation, soil conservation, improvement of range resources and low cost housing. The estimated cost implications of these projects, which are not reflected in the Programme outlay, are as follows:

Details of cost of projects under consideration by W.F.P.

(Sh.-000)

PROJECT	Total cost	W. F. P.	Govt. & Other
Land clearance and cultivation	1,325	625	700
Soil conservation	400	250	150
Plant protection	265	75	190
Improvement of water supplies	520	400	120
Improvement of range resources	160	60	100
Low cost housing	8,202	4,215	3,987
Total	10,872	5,625	5,247

While the government attaches considerable importance to social welfare projects, it is not possible to provide in the short run for all such projects no matter how desirable they may be. It has to be reckoned painfully that in developing countries with little material resources, social welfare projects have to occupy a secondary place and their sustained growth must necessarily depend on the expansion of the commodity sectors. Nevertheless, in keeping with our concern for social welfare, funds will be allocated through the ordinary budget for improving the condition of the orphanage at Mogadishu, the childrens' camps at War Sheikh and Hargeisa. For the time being attention should be centred on re-organisation and effective working of these three social welfare institutions.

The Ministry of Rural Development will also explore the possibility of enlisting the assistance of the police force and the young pioneer wing of the Somali Army. It is hoped that their assistance will be readily available for organising in conjunction with the local population, programmes like land clearance, construction of drinking water wells, ponds, and reservoirs, clearance of canals and other constructional innovations. The necessary regional and district administrative organisation will be set up for this purpose by the Ministry of Rural Development.

B. The Projects

a. Education.

School construction. The new schools to be built under the construction programme will be financed exclusively by grants. All schools are expected to be completed during the period of the Programme. The cost of the construction programme and the number of pupils the new schools will accommodate is given in the table below:

Cost and pupil accommodation details

of school construction programme

SCHOOL	Cost Sh. million	Number of pupils
Hargeisa secondary	2.0	240
Mogadishu secondary		480
Hargeisa secondary (boarding)	5.2	240
Mogadishu secondary	2.2	480
Galcaio intermediate (boarding)	4.4	240
Merca intermediate	3.1	240
Hargeisa intermediate (girls)	1.0	120
Afgoi secondary (agricultural)	4.1	240
All	22.0	2280

Teacher training college in Afgoi. — This degree level college will be located in NTEC premises and will accommodate 300 students. Equipment for tuition will be provided by UNICEF/UNESCO and USAID.

Text book publication. — The Ministry of Education has hitherto relied on local duplicating machines for producing instructional material, which has proved to be expensive. The problem will become more acute as the Ministry is planning to publish text books suitable for local schools.

Capital expenditure on the project involves the purchase of two line-printing machines and is expected to be provided by UNICEF and UNESCO jointly.

The recurrent costs of the above educational projects are set out below:

Recurrent costs of Educational Projects

(Sh. 000's)

	1968	1969	1970	Total
Hargeisa and Mogadishu secondary	153	306	459	918
Hargeisa secondary (boarding)	111	224	333	668
Mogadishu secondary	102	204	307	613
Galcaio intermediate (boarding)	84	168	252	504
Merca intermediate	24	48	72	144
Hargeisa intermediate (girls)	12	24	36	72
Afgoi secondary (agricultural)	120	240	360	720
Teacher training college Afgoi	102	138	198	438
Printing text books	109	110	111	330
Total	817	1462	2128	4407

b. Manpower, employment and training.

Manpower survey — With a view to bringing the earlier information up-to-date and also making it more comprehnesive the Department of Labour will conduct in 1968 another Manpower Survey. This Survey is intended to:

Collect the existing manpower supply position at various levels of skills in the private sector in most, if not all, of the important industrial and agricultural centres;

Assess the present and future requirements of the existing establishments in the private sector;

Find out the latest manpower supply position at various levels of skill in Government Departments and autonomous agencies in the public sector;

Assess future manpower requirements at various levels of skill in the private and public sectors in the light of the Programme;

Estimate the output of educational institutions during the Programme and thereafter;

Estimate the anticipated number of Somali students studying abroad;

Prepare a manpower budget to guide future educational, training and manpower policies.

Since survey work will continue at periodical intervals the Programme has provided for another survey in 1970.

Craftsmen Training Centre — To fulfil the need for producing new skilled craftsmen as well as training the semiskilled, a scheme for setting up a craftsmen training centre in Mogadishu is under consideration. Foreign assistance is being sought to finance the buildings, the cost of equipment and instructors.

Rehabilitation centre — Apart from persons disabled through accidents in their place of work, there are large numbers of crippled and handicapped children and adults. Rehabilitation is one of the basic responsibilities of state and society. A workshop for the training and rehabilitation of disabled persons will be set up. It will become a productive fore-runner of several other similar centres in other parts of the country.

Somali Institute of Public Administration. The Somali Institute of Public Administration was established in 1966 with the aid of the United Nations Special Fund to assist the Government in the various aspects of training of public servants. The Institute has autonomy in the planning and execution of its programmes but administratively it is attached to the Presidency, Council of Ministers. The association of the U.N. Special Fund with the Institute will end in 1970 and thereafter it will be run exclusively by the Somali Government.

There are three branches of activities of the Institute.

i. Training Service.

ii. Organisation and Method Service.

iii. Technical Advisory Group.

i. Training Service. This service visualises the holding of short courses as well as in-service training for the Civil Service staff. It is anticipated that during the initial period of operation till 1970, 400 persons at each of the following levels will be trained.

a. Management level training.

b. Middle-level management level training.

c. Clerical and general management training.

ii. Organisation and Method Service. It is recognised that modern methods of office organisation and work rationalisation increases the quality as well as the quantity of work output. The Organisation and Method Service of the SIPA is intended to introduce modern techniques of office management in government department and autonomous agencies. It will also prepare manuals of office procedure suitable for the various offices.

iii. Technical Advisory Group. This group will engage themselves in:

a. Revising the structural organisation of all Ministries;

b. Fix a realistic establishment in each of the Ministries;

c. Define job description of established posts;

d. Place available personnel in suitable posts.

Social Security. The Programme also proposes to set up a few welfare centres for providing recreational and educational facilities for workers and their families. While it has not been feasible to earmark any funds for this purpose out of programme allocations, the Ministry of Health and Labour will attempt to start some centres out of its normal budgetary grants.

The need and importance of providing some measures of protection against the social hazards of employment, accidents, occupational diseases, illness, old age and death is fully realised by the government; already there is an operational scheme administered through the Somali Security Organization (CASS) covering provision of medical care and payment of temporary or permanent incapacity benefits and survivors benefits in cash. The scheme's coverage is compulsory and the cost is met out of employers' contributions. It is proposed to review it shortly to make it more comprehensive, efficient and financially viable.

Besides the scheme for insurance against occupational hazards there is also a smaller one for the provision of sickness insurance on a voluntary basis. It is at present largely confined to expatriate firms, foreign embassies and a few banks. The Social Security Organisation has also been examining the possibility of extending sickness insurance to Somali workers on a contribution basis.

A further acturial evaluation of sickness insurance will be made during the Programme. Since this scheme entails considerable initial financial outlays it is expected to be subsidized.

c. Health.

Ecological factors have a major bearing on the health picture of the Republic. The vast surface area, the long border line, particular climatic factors, occupation and the level of literacy, each plays its own part. A national health plan is to be framed after taking all these factors into consideration.

Sub-optimal health affects both attendance at work as well as labour productivity. The battle against disease and the maintenance of adequate health standards are therefore indispensable for the fulfillment of our economic objectives.

Up to the present medical facilities tended to be concentrated in the capital city and other urban centres. While this is a general phenomenon observable in developing countries, it must not be forgotten that the bulk of our people are nomads widely scattered over the country. Transport has not developed to a point where health centres are readily accessible to them. Emphasis is therefore given in the Programme to the extension of health services to the peripheral areas without curtailing services to the urban population. Providing health care to a nomadic people is a complex problem. The ideal approach to this is a subject which is still under study by experts.

Basic health services have been defined as a network of coordinated peripheral and intermediate health units with a central administration capable of effectively performing a selected group of functions essential to health in a given area and ensuring availability of competent professional and auxiliary personnel to perform these functions. These services exist at the periphery and constitute the focal points form which preventive and curative services can be made available. Thus, the essential requirements for health improvement is the creation of a network of dispensaries buttressed by public health wings. The general pattern that will evolve starts at the periphery with rural dispensaries expanding by stages through hospitals, both larger and better equipped, and still further to hospitals in the urban centres with their specialized staff and equipment.

The modern concept of health service is based on the integration of preventive and curative functions. This can be achieved by the creation of a number of public health wings in the regional centres. These units will carry out maternal and child care, immunisations and advisory work on nutrition. The officers attached to these units will also advise the community on general sanitation and improvement of their environment.

Government recognizes that existing medical facilities are insufficient and fall short of requirements. The country's needs are immense and can only be met gradually. Nevertheless, in view of the need to continue the battle against disease, notably in the rural areas which have hitherto remained largely neglected, the Programme includes allocations for the construction, equipment and operation of 14 rural dispensaries, 8 public health wings, 2 infirmaries, the continuation of WHO assisted projects, and the equipment and operation of 25 additional rural dispensaries. The construction of these additional dispensaries will be on a self-help basis with World Food Programme assistance.

The health projects envisaged in the Programme are set out below (a).

	Sh. million
Rural dispensaries	2.0
Public health wings	0.8
Infirmaries	1.7
W.H.O. Projects	11.7
Malaria pre-eradication	(2.6)
Tuberculosis control	(2.4)
Small pox eradication	(0.8)
Basic health administration	(1.2)
Nursing education	(0.7)
Training dental assistants	(0.3)
Health training institute	(3.7)
Total	16.2

(a) Excludes the self-help projects assisted by the World Food Programme which are included in the section on Community Development.

d. Community Development and Social Welfare.

Details of the projects included in the Programme are given below:

	Sh. 000
Agriculture	**216.0**
Provision of 108,000 rations to 600 prisoners for 6 months to extend farm area and increase productivity.	
Animal Husbandry	**171.6**
Training 560 students and construction of 100 tanning pits involving Sh. 118,000 worth of rations.	
Irrigation	**478.0**
Clearing 10 km. of secondary canals and 30 km. of smaller canals and diking 10 km. of river banks involving 79,500 man days.	
Basic Infrastructure	**1,327.0**
Construction of 75 shallow wells and 75 masonry tanks involving 112,500 man days (estimated cost Sh. 942,000); construction of 80 km. of various types of roads involving 60,000 man days (estimated cost Sh. 385,000).	
Social Infrastructure	**6,853.0**
Education: Provision of 972,000 rations 1,200 boarders for 3 years and establishing 5 school vegetable gardens involving 10,000 man days (estimated cost Sh. 1,250,300); construction of 180 class rooms involving 100,800 man days (estimated cost Sh. 1,360,800) construction of 10 school kitchens involving 5,600 man days, opening 40 new women education extension centres involving rations worth Sh. 218,000 for cookery snacks and construction and equipment of 40 community centres involving 84,000 man days (estimated cost Sh. 1,706,800); construction of 300 class rooms (estimated cost Sh. 1,956,000)	6,273.0

Health Extension of 25 dispensary buildings involving 40,000 man days (estimated cost Sh. 390,000), provision of 187,500 rations of Somali cents 40 each for trainees,construction of 4 class rooms (estimated cost Sh. 120,000); construction of 1,000 sanitary latrines involving 5,000 man days (estimated cost Sh. 70,000). 680.0

Training. — The community development programme envisaged above will need trained multi-purpose workers to render professional services to local communities, effectively organise them, meet their common needs and create local leadership. It will also be necessary to provide training, through short courses, to enthusiastic village leaders in group dynamics and in specific subjects of interest to the community. A sum of Sh. 200,000 has accordingly been allocated for organising these training programmes for the village leaders and the multi-purpose workers.

Social infrastructure — Project costs and sources of finance

(Sh. 000)

PROJECT	DOMESTIC			FOREIGN		
	Ordinary Budget	Additional Budgetary Provision	Other	Grants	Unspecified	Total Project Cost
Education	**—**	**4,402**		**22,378**		**26,780**
School construction		3,635		22,000		25,635
Teacher training		437		98		535
Text book publication		330		280		610
Health	**3,258**	**4,528**		**8,422**		**16,208**
Rural dispensaries		1,990				1,990
Public health wings		828				828
Infirmaries		1,710				1,710
W.H.O. Projects	3,258			8,422		11,680
Malaria pre-eradication	(1,800)			(807)		(2,607)
Tuberculosis control	(725)			(1,629)		(2,354)
Small pox eradication	(131)			(675)		(806)
Basic health administration	(51)			(1,105)		(1,156)
Nursing education				(673)		(673)
Training dental assistants	—			(282)		(282)
Health training institute	(551)			(3,251)		(3,802)

PROJECT	DOMESTIC			FOREIGN		Total Project Costs
	Ordinary Budget	Additional Budgetary Provision	Other	Grants	Unspecified	
Manpower, employment and training	**1,783**	**500**	**—**	**5,381**	**3,534**	**11,198**
Manpower survey	72					72
Craftsmen training centre	233				3,434	3,667
Rehabilitation centre	150				100	250
S. I. P. A.	1,328			5,381		6,709
Social security		500				500
Community development — self help	**—**	**3,086**	**1,490**	**4,671**		**9,247**
Agriculture		108		108		216
Animal husbandry		34	20	118		172
Irrigation		130		348		478
Roads		85		300		385
Water supplies		257	150	535		942
Education		2,082	1,230	2,962		6,274
Health		190	90	300		580
Training		200				200
Total	5,041	12,516	1,490	10,852	3,534	63,433

Chapter 12

STATISTICS AND CARTOGRAPHY

a. Statistics.

Economic planning requires a quantitative measurement of the economy as a whole and the examination of the inter relationships among its major components. Projections based on these measurements would then indicate probable changes in the economy over a period of time. A systematic collection of such statistical data can be undertaken only by a disciplined and technically equipped organisation - factors which are not markedly conspicuous at present.

Given Somalia's embryonic stage of statistical development it would not be feasible during the span of the current Programme to obtain data relating to quantitative sectoral interdependence. Basic priorities must therefore be centred on demographic data (including labour force data), the external sector, banking, capital formation, public finance, output, employment and wages data. Accurate price statistics are also significant since they assist in estimating aggregate values of output.

The utility of demographic data stems from their importance in providing the basis for projections required in long term planning, including labour force projections. Since the objective of most development plans is to effect structural changes and thereby raise national and per capita incomes, the extent to which this can be achieved can only be evaluated by quantitative knowledge of demographic data. The basic requirment is a census which would cover the population, agriculture and livestock. Work on such a census should be initiated as early as possible so as to serve as a basis for development planning in subsequent periods.

Capital formation is one of the prime movers of economic development. The need to obtain this data for planning purposes is central to the planning process. Public finance statistics are also essential in evaluating the effectiveness of the public sector in fostering economic growth. Such data are mandatory for the planning and allocation of resources for public sector capital formation between commodity production projects and other projects. Output statistics are fundamental for assessing the levels of agricultural, livestock and industrial production. Whereas a start should be made during the current Programme to concentrate on collection of data relating to the salient economic sectors, the general strategy should be to build up a comprehensive system of national accounts.

Comprehensive development planning also entails a knowledge of all productive and distributive activities. Collection of these data involves a multitude of statistical operations which can only be carried out over a period of considerable time. In some sectors, such as industry, direct records of various categories of transactions can be acquired, whereas in others, such as agriculture, values have often to be imputed from estimates of physical output and price data.

Even when all the relevant data on output and distribution, household budget, public finance, capital formation, balance of payments and external trade are available, there still would remain the difficult problem of classification of intermediate and final products. It is crucial, therefore, that weighty consideration be given to the need for setting up of a system of national accounts for Somalia.

While exiguous financial resources imply that priorities must be centered on the salient economic sectors, it is immediately apparent that there is a close interdependence between all aspects of economic and social statistics. If individual statistical categories are studied in isolation from planned requirements there is always the peril that marked imbalances may arise in the statistical work programme. A comprehensive approach must thus always be kept to the fore, given the dynamic nature of statistical requirements. In the incipient stages of Somalia's statistical development such an approach ensures the optimum use of incomplete data since they provide the means of making a wide range of consistency checks and adjustments. It should, of course, be borne in mind that the comprehensive approach in no way obviates the necessity for a continuous improvement in the quality of statistical data.

Successful fulfilment of any statistical work programme inevitably turns on the strength of a statistical organization, and the measures of effective coordination among ministries. In the case of Somalia such organzation is at best tenuous and coordination machinery at the regional, district and village level non existent. This is primarily due to the heritage bequeathed by the colonial powers, but one which unfortunately has largely been self-perpetuating since independence despite some remarkable progress that has been made. The major objective of the current Programme is to overhaul the existing statistical organization so as to meet the pressing demands of modernization.

If effective planning is to be assured there must be an intimate link between the central statistical organization and the Planning Commission which is the main user of such data. It has been generally recognized that the central statistical organization should be endowed with a reasonable degree of autonomy in elaborating its work programme; this autonomy is dictated by the need to ensure unbiased fact-finding while maintaining the confidential character of data supplied by individuals or firms.

In the initial stages of development, it may, under certain conditions, be desirable for a central statistical organization to be highly centralized to avoid duplication of effort, as well as other vicissitudes stemming from a division of labour on a subject basis among ministries. Such an orientation has a direct bearing on the punctuality of data and its utility within the context of a coherent statistical programme. There are many factors which militate against a policy of centralization, since some statistical work is being done by other ministries. Whether this transfer should be made immediately or not will necessarily depend on the priorities of the statistical programme and the human resources available. This latter point remains to be worked out.

In general, it might be said that the central statistical office should retain, as far as possible, responsibility for general economic statistics whereas more specialized technical data might be handled by statistical units in the relevant ministries. Even where data collection is decentralized, the statistical organization should be charged with the planning of enquiries, definitional standardization and presentation of data. Certain African countries have established coordinating committees for this purpose, whereas in others it has been the practice to outpost statisticians to decentralized units while retaining control over their work.

It is expected that the final organisational structure of the statistical services will be made during current Programme. Since the nation at present does not have sufficient numbers of Somali statisticians a short and long term training programme should be immediately blueprinted and implemented.

In view of the central importance of statistical services for economic development, it is suggested that the present allocation for Statistics be raised from 0.1 per cent of the budget to 0.2 per cent in the first year of the Short Term Development Programme; to 0.3 per cent in the second; and 0.4 per cent in the final year.

The following table gives the financial requirements of the statistical projects to be undertaken during the Short Term Development Programme.

Statistical Projects: Financial Requirements

(Sh. 000)

	1968	1969	1970	Total
Multi-purposes surveys	225	422	652	1,299
Pilot survey of nomads	20	20	10	50
National accounts	25	25	25	75
Programme evaluation	6	6	6	18
Census of population and agriculture	12	12	12	36
Contingencies	12	5	5	22
Total	300	490	710	1,500

b. Cartography.

Cartographic work in Somalia is still in a preliminary stage. Some documentation of maps, aerial mosaics, aerial photographs, and vertical and horizontal control records emanating from a multiplicity of sources, is available. This documentation is unsystematic and fragmentary. During the Programme period a beginning will be made to systematize and up-date these documents. Further, it will be necessary to complete and unify the existing geodetic network on a national basis and to relate it to cartographic work. This would therefore require close and continuous sub-regional cooperation.

The estimated cost of projects outlined for inclusion in the Programme are:

	(Sh. 000)
Preliminary projects for vertical and horizontal control	105
Joint centres for specialized services	70 (a)
Preparation of topographical mapping	70
Records unification and standardization	42
In-service training and fellowships	560
Technical library and staff	105
Centralization of mapping units	245
Total	1,197

(a) Operation of the Mogadishu centre only.

These are highly tentative overall financial estimates. It is expected that all or most of these project allocations would be financed with the assistance of friendly countries and international agencies. Negotiations to this end will be started, given the pivotal importance of cartographic and mapping work for national economic development such as water supply, control and irrigation, transport, mineral prospecting, agricultural development and land utilization, land registration and the multitude of statistical applications of cartographic analysis. Modern cartography is perforce an essential component of nationl and regional planning. The outlined cartographic projects embodied in the Programme are merely a prelude to those that will be forthcoming in the subsequent development plan.

The above projects do not include expert services and equipment, materials and transport.

Preliminary projects for vertical and horizontal control These two basic projects are the starting point for negotiations for the setting up of a joint centre for specialized services; they would, in addition, offer guidelines for classifying and unifying the activities of the Survey and Mapping Department.

For the preparation of scientific and acceptable projects direct working contacts with the Economic Commission for Africa (cartography section) and national cartographic institutes in the sub-region are indispensable. The rationale of such cooperation springs from the basic need to compare existing projects within countries of the East Africa sub-region; to study existing levels and standards of survey work in triangulation and levelling; study organizational structures and methods; carry out survey and control as well as extend the Somali trignometrical and levelling networks to other countries in the sub-region.

Joint Centres for specialized services — An ECA mission to member states suggested the establishment of Joint Centres. A joint centre for first order geodesy and another for aerial triangulation should be set up in Somalia. The urgency for these two centres have been dictated by the absence of a country wide geodetic, astronomic and topographic control. Only small areas of the country are separately covered by up to date aerial photographs. It was proposed to set up a centre of first order geodesy in Niamey which is about 3,500 km. from Somalia and a joint centre for aerial triangulation in Ibadan, Ife and Cairo. All three are well over 3,500 kms from Mogadiscio. Given the backlog in cartographic work, inauguration of these two centres would be a great step forward in cartographic research and there would be more than ample opportunity for their full employment for several years to come.

Horizontal and vertical control	*Estimated data*
Former southern part	168,000 Kms^2
Number of trigonometric stations	650
Length of precise levelling lines	1,500
Number of tide gauge stations	3
Area to be covered by aerial photos triangulation	572,000 Kms^2
Estimated time required for first order geodesy	4,000 weeks of one team work
Estimated time required for precise levelling	1,500 weeks of one team work
Expected expenditure for UNDP, Mogadishu office	Sh. 70,000

Preparation of topographic mapping — During the period of negotiations for these two aforementioned projects, it would be advisable to undertake preparatory work for a national map which would involve publication of a code of symbols and sample sheets on a scale of 1: 100,000 and 1: 50,000. This is a ratio of one centimetre on the map to one hundred thousand centimetres and fifty thousand centimetres respectively; adoption of systematic norms should be prepared and published and would inevitably imply the introduction of new organizational forms. The work programme would entail the coordination of all professional efforts now being made in the preparation of a national map.

Records unification and standardization — The objective is to initiate a systematized documentation centre with explicitly defined areas of individual responsibility since already much valuable documentation: aerial photographs, map originals and map prints are rapidly deteriorating due to humidity and inadequate filing system. It is extremely important to prepare a simple and effective system of records and files that should be adapted by all government departments, particularly by Survey and Mapping Department, which would then become a centralizing point for mapping and survey projects.

In-service training and fellowships, technical library and staff — It is the objective of the Programme to work out a coherent and continuous training scheme at all mapping levels. Counterparts with appropriate educational qualifications should be selected on merit and assigned to each section. At the moment the linkage effects between present and future experts are non-existent. However, effective operational work necessitates continuity. In terms of manpower requirements, attention will be focused on the need for bonding individuals to a given department for a specified period of time since it has been found that persons trained in various mapping techniques have migrated, upon their return to Somalia, to occupations which are utterly irrelevant to their costly professional training. Such a rigorous programme is called for to diminish the almost exclusive reliance on expatriates. As an integral part of the in-service training programme it is proposed to set up a technical library with a trained librarian and supporting staff to ensure availability of the latest technical publications with the provision of training and study materials.

Centralization of mapping units For reasons of costs and efficiency it is desirable to centralize all activities into a complex of buildings located in the existing compound. Centralization would imply an extension of the building complex at Kilometre Six, and the installation of an off-set printing unit; such centralization would ensure the fall and rational utilization and proper maintenance of existing equipment.

Statistics and Cartography — Project costs and sources of finance

(Sh. 000)

PROJECT	DOMESTIC			FOREIGN		Total Project Costs
	Ordinary Budget	Additional Budgetary Provision	Other	Grants	Unspecified	
Statistics		1,500				1,500
Cartography					1,197	1,197
Total		1,500			1,197	2,697